

SOAP

with which is included an

Insecticide & Disinfectant Section

Published by MACNAIR-DORLAND COMPANY, INC., 136 Liberty Street, New York



GERANIUM

Synthetic No. 1086

STABILIZED

DEPENDABLE

ECONOMICAL

Gives excellent results alone or in
conjunction with natural oil, and
saves you money

Soapmakers should examine
this new synthetic, and be
convinced of its value



GIVAUDAN-DELAWANNA, INC.
80 FIFTH AVENUE NEW YORK, N.Y.

Largest Manufacturers of Aromatic Products in America

DOW CAUSTIC SODA

SOLID — FLAKE — LIQUID

Our large manufacturing facilities for the production of a high quality Caustic Soda make us a dependable source of supply to manufacturers of soap and kindred products. We will gladly quote on your requirements in flake, solid or liquid form in any quantity.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Branch Sales Offices:

60 East 42nd Street, New York City

Second and Madison Streets, Saint Louis

Other Dow Products: Coumarin • Paradow (Pure Paradichlorbenzene)
Methyl Salicylate • Methyl Anthranilate • Phenol U. S. P.

TRADE

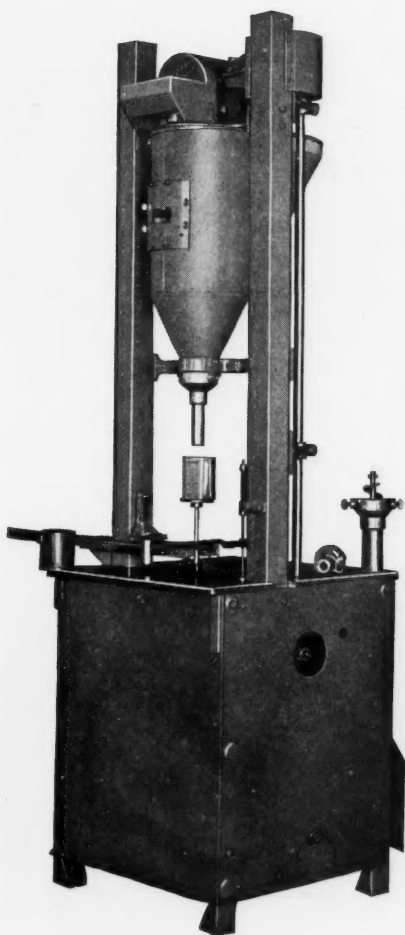
DOW

MARK



**IT FILLS VARIED
CONTAINERS WITH ALMOST ANYTHING**

*Fast, Accurate, Dependable, It Saves
More Than It Costs*



THE Stokes & Smith American Filler is preferred by many leading manufacturers on the ground of economy alone. So flexible it accurately weighs, loose fills or packs envelopes or containers varying in size from $\frac{1}{2}$ ounce up to 5 pounds, it is not a one job machine — never stands idle when there is work to be done.

So fast that it fills 15 to 25 containers per minute, it easily replaces hand-filling methods where yearly wages are greater than its cost. Preventing drip, spill and over-filling, its first year savings are often even greater than this.

Annette's Perfect Cleanser Company of Boston, Mass., use Stokes & Smith American Fillers on containers widely varying in size. Shown in the illustration are the $\frac{3}{4}$ -ounce size, filled at the rate of 20 to 25 per minute, and the 4-ounce size filled at the rate of 18 to 20 per minute. Eliminating waste, preventing lost time and employing fillers that are flexible enough for all their requirements, has helped the Annette Company sell a good product at a fair price.

May we arrange a demonstration for you?

STOKES & SMITH COMPANY

4915 Summerdale Avenue
Philadelphia, U. S. A.

British Office: 23, Goswell Road, London, E. C. 1

Say you saw it in SOAP!

THE NEWPORT AROMATICS

*for
soap*

COUMARIN, SCUR

Crystals or Powder

Known in every manufacturing center of the world as a product distinguished for its strength and purity. No finer quality is made.

NEWPORT DIMETHYL HYDROQUINONE

In every soap formula containing Coumarin less can be used if Dimethyl Hydroquinone is employed. The Dimethyl Hydroquinone reinforces the Coumarin without changing the perfume of the finished soap, is lower in cost, does not discolor, is stable in soaps and alkalies and has real fixative value.



Newport Chemical Works

Incorporated

Passaic, New Jersey

Phone PAssaic 2-3275

Sole Agents for
Societe des Usines Chimiques
de Rhone-Poulenc
Paris, France

New York Office
260 West Broadway
Phone WAlker 5-6166

Chicago Office
605 W. Washington Blvd.
Phone MONroe 2686

Say you saw it in SOAP!

SOAP

Reg. U. S. Patent Office

with which is included an
Insecticide & Disinfectant Section

Volume VII

October, 1931

Number 10

TABLE OF CONTENTS

EDITORIALS—

Announcement	19
Alkali Designations	19
Soap and a Message to Garcia	19
Germicidal Activity of Soaps	20
Scared Stiff !	20
Advance Selling	91
Disinfectant Tests	91

FEATURE ARTICLES—

Elbert Hubbard—Soap Salesman	21
Now is the Time to Reduce Your Costs— By Francis Chilson	25
Measurement of Rancidity Reactions— By Kurt Taufel and Josef Muller	29
Pyrethrum—1917-1931— By John Powell	93
Demonstrating the Modern Insecticide	97
Mexico as a Market for Animal Dips— By Robert Frazer	101

DEPARTMENTS—

Personal and Impersonal	41
Soap Chemists' Section	45
Products and Processes	47
Contracts Awarded	49
Record of Trade Marks	51
New Patents	53
Market Reports	55 to 65
Current Raw Material Prices	67

«
Insecticide and Disinfectant Section, which is included as a department of every issue of SOAP, begins on page 77. News, articles, and editorial opinion on insecticides, disinfectants, and allied sanitary products appear in that section of this publication.

«

Published monthly on the 15th by

MACNAIR-DORLAND COMPANY, INC.

Ira P. MacNair

Grant A. Dorland

136 LIBERTY STREET

PUBLISHERS

NEW YORK, N. Y.

Subscription rate \$3.00 per year. Copy closing dates—7th of month of issue for reading matter and 25th of month preceding month of issue for display advertising. Entered as second-class matter, April 11, 1931, at Post Office, New York, N. Y., under act of March 3, 1879. Circulation, September, 1931, issue 2,412 copies. Total Distribution, 2,600.

CONSTANT *as the*
"TRADE WINDS"



DIAMOND ALKALI



Just as the salt-bitten sailing masters of old learned to place the utmost confidence in the steadiness of the Trade Winds, so has Modern Industry learned to depend implicitly on the high quality and unvarying uniformity of Diamond Alkalies.

**DIAMOND
PRODUCTS**

58% Soda Ash
76% Caustic Soda
Bicarbonate of Soda
Liquid Chlorine
Diamond Crystals
Special Alkalies

Diamond Alkali Company

Pittsburgh, Pa., and Everywhere

Say you saw it in SOAP!

LAVENDER

EVEN in early antiquity, the fragrance of Lavender was used in the form of an oil. Constant progress in distillation methods has raised its quality to the high level found in Barreme Lavender, the paragon of all French Lavender Oils. Several years of experimenting with extraction and purification methods has at length enabled us to offer to the soap maker:—

LAVENDER LIQUID ABSOLUTE ESSENCE, BARREME



This splendid product is now priced sufficiently low to be used as a constituent in soap perfumes. When blended with the distilled essence, the resultant perfume is more complete and retentive, adding not only to the bouquet but to the fixation of the perfume. Write us for full details about these products of universal application. Sample and information bearing on your particular problem will be sent you for the asking.

Oil Lavender Flowers, Barreme (50% Ester)
Oil Lavender Flowers, Barreme (38 / 42% Ester)
Oil Lavender Flowers, No. 1 U.S.P. X Extra
Oil Lavender Flowers, U. S. P. X
Oil Lavender Flowers, Artificial
Oil Lavender Flowers, Terpeneless
Oil Lavender Flowers, Liquid Absolute Essence

FRITZSCHE BROTHERS, Inc.

Proprietors of
PARFUMERIES
DE SEILLANS
Seillans, France

78-80-82-84 BEEKMAN ST.
New York, N. Y.

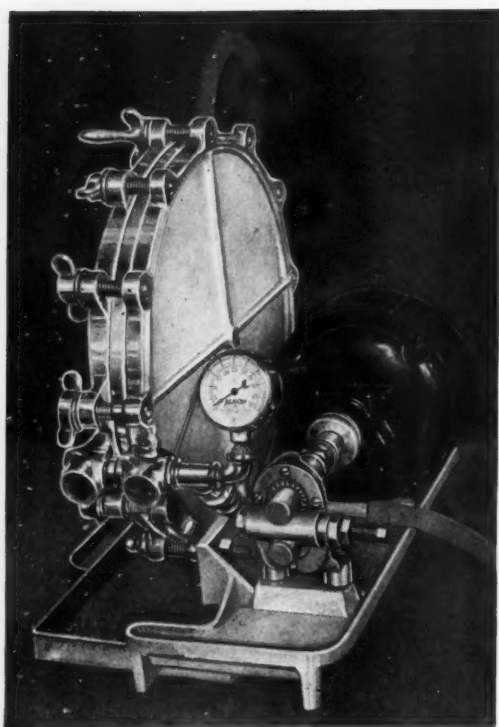
Sole Agents in the
U. S. and Canada for
SCHIMMEL & CO.
Miltitz (Near Leipzig)
Germany



Say you saw it in SOAP!

BRILLIANCY

WITH THE NEW *Hy-Speed* ASBESTOS DISC FILTER



BENCH TYPE—two-disc filter. Other models up to 100 discs.



EVERY LIQUID sold in glass must have a brilliant, crystal-clear sparkle; convincing proof . . . at the point of sale . . . of the superior purity and quality of your product.

The new "*Hy-Speed*" Asbestos Disc Filter will impart an ultra-brilliancy to every drop of your product.

Your liquid is forced through the proper type of "*Hy-Speed*" Asbestos Filter Disc, the composition of which can be custom-made to answer your requirements.

CONCLUSIVE PROOF

Let us demonstrate these proven results on your own product. We will filter and return any sample you care to submit.

IMPORTANT

"*Hy-Speed*" Asbestos Filter Discs can be supplied to fit any disc filter. Send for sample disc, specifying exact diameter and type of liquid. Make your own comparison between this and your present filter medium.

ALSOP ENGINEERING CORP

MANUFACTURERS OF *Hy-Speed* LIQUID-HANDLING EQUIPMENT AND "ALSOP" GLASS LINED TANKS
39 West 60th Street

New York City

Say you saw it in SOAP!

A Buckeye Wax for **EVERY TYPE of FLOOR!**



**For LINOLEUM, WOOD, TILE,
TERAZZO, MARBLE and
CEMENT FLOORS**

BUCKEYE LIQUID WAX is a perfect emulsion of minutely divided particles of hard wax in a quick-drying solvent of high flash point.

It is so smooth, so perfectly dispersed throughout the liquid, that it will spread easily, quickly and thoroughly to produce an even film over the surface. Requiring only about 20 minutes to dry before polishing, it gives a hard, brilliant, greaseless finish, difficult to mar.

You may buy BUCKEYE LIQUID WAX in 55 gallon drums, half drums, quarter drums, 10 gallon cans, 5 gallon cans or 1 gallon containers. It requires no agitation to keep it in solution—no stirring every time you want to use it.



**For RUBBER TILE, RUBBER
FLOOR, MASTIC FLOORING,
ASPHALT TILE FLOORING**

BUCKEYE AQUAWAX has been developed in our Laboratories for use on any flooring which is made wholly of rubber or which makes use of rubber in its composition.

BUCKEYE AQUAWAX contains a maximum percentage of hard waxes carried in finely dispersed particles in aqueous solution, and will not separate on standing.

It requires only a few minutes to dry, and produces a brilliant finish which is not slippery or greasy. Except where the traffic is unusually heavy, it will require rewaxing only two, or possibly three, times a year.

WRITE FOR SAMPLES AND PRICES

The Davies-Young Soap Company
Dayton, Ohio

"BUCKEYE"
LIQUID WAX

"BUCKEYE"
AQUAWAX

Copyright 1931
By The Davies-Young Soap Co.

Say you saw it in SOAP!



YOSOY

Based on extractions of Oriental Woods.

Sweet and everlasting.

**Particularly suitable for covering
disagreeable odors.**

Can be adapted to a full line.

THE MOST ECONOMICAL IN FINAL USE.

FELTON CHEMICAL COMPANY

INCORPORATED

MANUFACTURERS OF

AROMATIC CHEMICALS, NATURAL ISOLATES, PERFUME OILS,
ARTIFICIAL FLOWER AND FLAVOR OILS

Executive Offices and Factory

599 JOHNSON AVE. BROOKLYN, N. Y.

Chicago Office: 1200 North Ashland Ave., Chicago, Ill.

Say you saw it in SOAP!

for fine theatre sprays ~

WATER SOLUBLE PERFUMES

A completely new line of water soluble perfumes, especially made for use in theatre sprays, has been developed in our laboratories. These new products, which are made in wide variety of odors, may be used from two to four ounces to a gallon, depending on the strength desired in the finished spray. It is only necessary to mix them with tap water. The resulting solution will be practically clear and **will not separate**. These water soluble oils are available in three series—priced at \$1.50, \$3.00 and \$5.00 per pound. A few suggestions are given below.

Special Offer—We have a limited quantity of Terpinolene available. This product at 17 cents per pound, will be found very effective in masking harsh chemical odors.

Suggestions

Narcisse
Oriental
Jasmin
Lilac
Rose



Etablissements
ALBERT VERLEY

Represented in the United States by

ALBERT VERLEY, Inc.

11 East Austin St.

Chicago

Say you saw it in SOAP!

No Chemical Plant Is Complete Without a Compact Technical Library

And No Such Library Is Complete Without These Well-Known TECHNICAL BOOKS

Perfumes, Cosmetics and Soaps, by Poucher. New and revised edition of this standard reference. Volume I, a dictionary of raw materials, 394 pages, \$6.50. Volume II, dealing with the manufacture of soaps, perfumes and toilet preparations, 406 pages, \$7.50.

The American Soap Maker's Guide, by Meerbott and Stanislaus. The most recent American publication on soap manufacturing. 750 pages. \$7.50.

Textile Soaps and Oils, by Hurst & Simmons. A handbook on the preparation and properties of soaps and oils used in textile manufacturing. 212 pages. \$4.00.

Henley's Twentieth Century Book of Recipes, Formulas and Processes. A handy reference book listing 10,000 miscellaneous formulas, including special sections for soaps, polishes, insecticides, etc. 800 pages. \$4.00.

The Industrial Chemistry of Fats and Waxes, by Hilditch. A study of the fats and waxes in relation to their use in industry. 450 pages. \$6.00.

Commercial Oils, Vegetable and Animal, by Laucks. Technical data, trade rules and specifications on commercial oils for the non-technical man. 138 pages. \$1.50.

Manual of Toilet Soap Making, by Deite. Translation from a standard German text on manufacture of toilet and medicated soaps. 360 pages. \$8.00.

Art of Soapmaking, by Watt. Practical handbook on the manufacture of hard and soft soaps. 323 pages. \$4.00.

Chemical Encyclopaedia, by Kingzett. A digest of chemistry and chemical industry. 810 pages. \$10.00.

Soaps and Proteins, Their Colloid Chemistry in Theory and Practice, by Fischer. 272 pages. \$4.00.

The Examination of Hydrocarbon Oils, and of Saponifiable Fats and Waxes, by Holde. 572 pages. \$6.00.

Soaps, by Hurst. A practical manual of soap manufacture. 440 pages. \$7.00.

Soluble Silicates in Industry, by Vail. 443 pages. \$9.50.

Recipes for the Color, Paint, Varnish, Oil, Soap and Drysaltery Trades. 365 pages. \$5.00.

A Handbook of Soap Manufacture, by Simmons and Appleton. 167 pages. \$4.00.

Industrial Filtration, by Wright. 336 pages. \$6.00.

Glycerol and the Glycols, by Lawrie. 447 pages. \$9.50.

Van Nostrand's Chemical Annual, by Olsen. 897 pages. \$5.00.

Chemical Disinfection and Sterilization, by Rideal. One of the few books in this field, of particular interest to those engaged in sanitary work and consultant and analytical chemists. 313 pages. \$8.00.

Hydrogenation of Organic Substances, by Ellis. Latest revised edition of this well-known book, pre-eminent in the field of hydrogenation. 990 pages. \$15.00.

Soap Blue Book, A Buyer's Guide. 195 pages. \$1.00.

CHECKS MUST ACCOMPANY ALL ORDERS

NO BOOKS MAILED ON APPROVAL

MacNAIR-DORLAND CO.

136 LIBERTY STREET

NEW YORK CITY

Say you saw it in SOAP!



PROSPERITY HINT

PUSH THE PROFITABLE PRODUCTS

**GOOD LIQUID SOAP—SOLD RIGHT*
CAN'T HELP BUT INCREASE YOUR PROFITS**

Clifton specialized bases and liquid soap have been aiding many concerns towards a GREATER SUCCESS. (They can do the same for you.)

FOAMWEL LIQUID SOAP . . .

The main characteristics of Foamwel are quick and profuse lathering in both hard or soft water. It rinses off quickly leaving hands soft and smooth. Made from pure white Cochin coconut oil. Aged in cypress tanks before shipping. For these reasons Foamwel is distinctly superior to ordinary liquid soap.

CLIFTON LIQUID SOAP CONCENTRATE . . .

A concentrated product used for the manufacture of liquid soap by merely adding 2 to 3 times as much plain hydrant water. Clifton Liquid Soap Concentrate is made from the same high grade materials as Foamwel Liquid Soap but approximately $2\frac{1}{2}$ times as concentrated. (Anhydrous content 42%.) Saves time and labor. It is sparkling clear and stays this way in even the coldest weather.

CLIFTON LIQUID SOAP BASE . . .

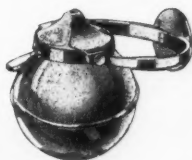
Recommended for those manufacturers who have facilities to use the solid material. Should be broken up in small pieces and dissolved in 2 or 3 times as much by weight of hot water. Add perfume and coloring if desired, then let stand for a few days after which time the liquid will become clear.



DUODEK SOAPER . . .

**Two
Durable Dispensers
That Will Help You
Get Reorders On
Liquid Soap.**

—
Chromium Plated



TILTYPE SOAPER . . .

SEMI-CASTILE LIQUID SOAP . . .

Made from half olive oil and half cocoanut oil. Used where an extra bland and unguent soap is required. Recommended for delicate hands.

OLIVE OIL SYRUP . . .

A concentrated product to which water should be added before filling dispensers. Contains a small percentage of cocoanut oil to enhance lather. Used in hospitals to wash new born babies.

OLIVE OIL BASE . . .

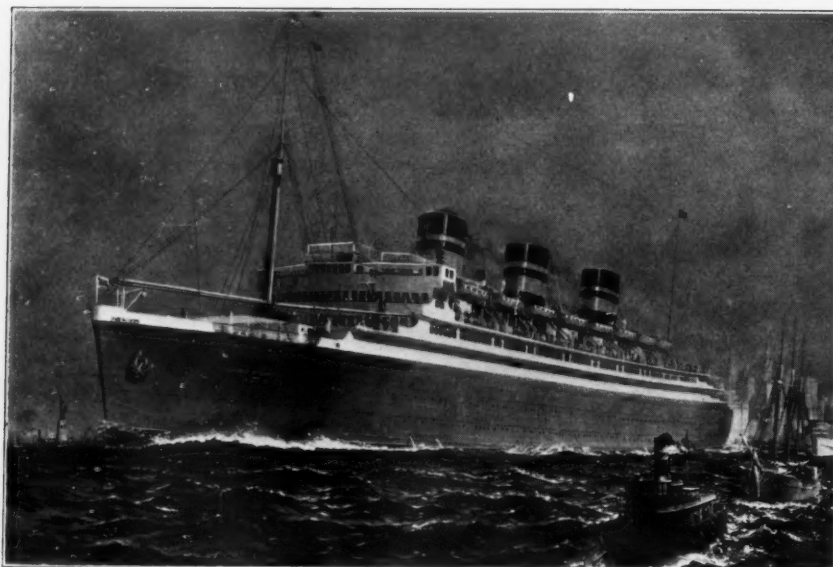
Made from 100% olive oil. Often used by manufacturers in connection with cocoanut oil base to accomplish extra softness and smoothness in making up finished liquid soap.

* One highly successful jobber found that by offering to install for prospects a dispenser filled with liquid soap for trial without charge that **5 out of 6 ordered!**

CLIFTON CHEMICAL CO., INC.
CLIFTON BLDG., 246 FRONT STREET, NEW YORK CITY

OTHER CLIFTON PRODUCTS—LIQUID FLOOR SOAPS, COAL TAR AND PINE DISINFECTANTS—OIL SOAPS—DEODORANT CAKES, BLOCKS AND CONTAINERS

Say you saw it in SOAP!



"MONARCH OF BERMUDA"

SEA-GOING CONVENTION

next time . . .

MR. CHAIRMAN! Open your convention as New York harbor fades in the distance . . . continue it as you take your fill of playing, sightseeing and typical British luxury in Bermuda, the favorite play place of all the world.

There's an idea for your next convention. Two super-luxury liners are at your service, the new 28,060-ton turbo-electric "MONARCH OF BERMUDA" (in service Fall 1931) and the completely remodeled 25,750-ton "BERMUDA," now accommodating 700 passengers—ready to transport your entire group in true trans-Atlantic elegance . . . Grand Social Halls, large and small assembly rooms, private meeting rooms for executive conferences . . . ready to mix pleasure with business in spacious, lavish lounges, verandah cafes, swimming pools; in the gym and on the largest sports decks afloat.

In Bermuda, you can carry on at a number of hotels, including the new St. George, with its swimming pool, private beach and private golf course, and the famous Bermudiana, built in a lovely tropical garden facing directly on Hamilton Harbor.

The "Ayes" have it! Get started now . . . find out about the special low all-expense convention rates!

For information apply CONVENTION DEPARTMENT

FURNES

Bermuda Line

34 Whitehall St. (Where Broadway Begins) 565 Fifth Ave., New York
Or any Authorized Agent

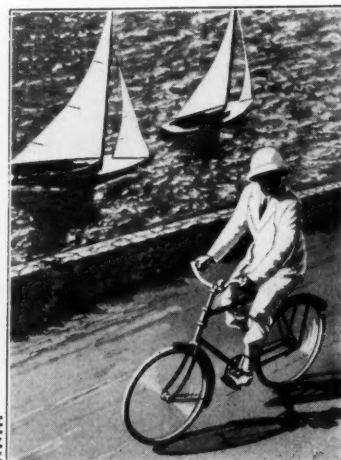
make
it
a

BERMUDA

is only
48 hours
away



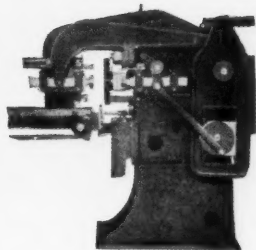
BOOK NOW
FOR 1932



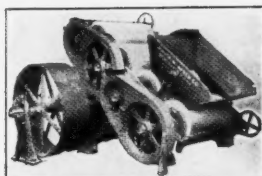
Say you saw it in SOAP!

SOAP MACHINERY

Special Offerings



4 JONES AUTOMATIC combination laundry and toilet soap presses. All complete and in perfect condition.



H-A SOAP MILL

This 4-roll granite toilet soap mill is in A-1 shape. Latest and largest size rolls.



DOPP CRUTCHERS

Sizes from 300 pounds to 3,000 pounds. All in best condition and guaranteed.

Quality Used Machinery

You can see NEWMAN equipment in actual operation at our Chicago warehouse.

DRYERS—Two Proctor & Schwartz Large Roll Soap Chip Dryers Complete. Three Proctor & Schwartz Soap Chip Dryers with five Chilling Rolls. Devine Double Drum Vacuum Dryer.

Proctor & Schwartz Bar Soap Dryers. Condon & Huber Soap Chip Dryers.

SOAP CRUTCHERS—Houchin-Aiken, Dopp & Doll Steam Jacketed Crutchers, 1000 lb., 1200 lb., 1350 lb., 1500 lb., 1800 lb., 3000 lb., 6000 lb. and 10,000 lb.

SOAP PRESSES—Jones, Machinery Designing, & Ralston Automatic Presses for toilet and laundry soap. Dopp, Crosby & Empire Foot Presses. Scouring Soap Presses.

GRINDERS & MIXERS—Day Jacketed Marshmallow Mixers, Pony Mixers, Talcum Powder Mixers, Rouge Mixers, Ointment Mill, etc. Schultz O'Neill Mills.

SOAP CUTTING TABLES—Houchin-Aiken Steel Automatic Table with self-spreader and extra headers.

Wooden Tables with and without self-spreader attachments.

SOAP SLABBERS—Houchin-Aiken, Curtis-Davis, Dopp & Newman's Hand and Power Slabbers.

TOILET SOAP MILLS—2, 3, 4, 5 and 6-roll Granite Soap Mills. Houchin-Aiken 4 and 5-roll Steel Mills.

Buhler 3, 4, 5-roll Steel Mills.

PLODDERS—Houchin-Aiken, Rutschman & Allbright-Nell 6", 8" and 10" Plodders.

SOAP POWDER MACHINERY—Blanchard No. 10-A and No. 14 Soap Powder Mills.

Broughton Soap Powder Mixers. Wms. Patent Crusher & Pulverizer.

Sedberry Crusher, Grinder & Pulverizer.

A-N 5x7 Crystallizing Rolls.

FILTER PRESSES—Sperry, Perin & Shriver Cast Iron Filter Presses 12", 18", 24", 30" and 36". International and Monopod Filters.

VARIOUS OTHER ITEMS—Wm. Garrigue Glycerine Evaporators.

Steel Soap Frames, 600 lb., 1000 lb., 1200 lb., 1500 lb., and 1800 lb. cap.

Automatic Soap Wrapping Machines.

Steel, Copper and Aluminum Kettles.

Soap Remelters, Tube Fillers. Filling and Weighing Machines.

Pneumatic Scale Corp. Can Filling Machine for cleansers, etc.

Brass Soap Dies for foot and aut. Presses.

Soap Chippers, Scales, Motors, Amalgamators.

Soap Racks, Bottle Filling and Capping Machines. Talcum Can Crimpers, etc.

Send us a list of your surplus equipment—We buy single items or complete plants.

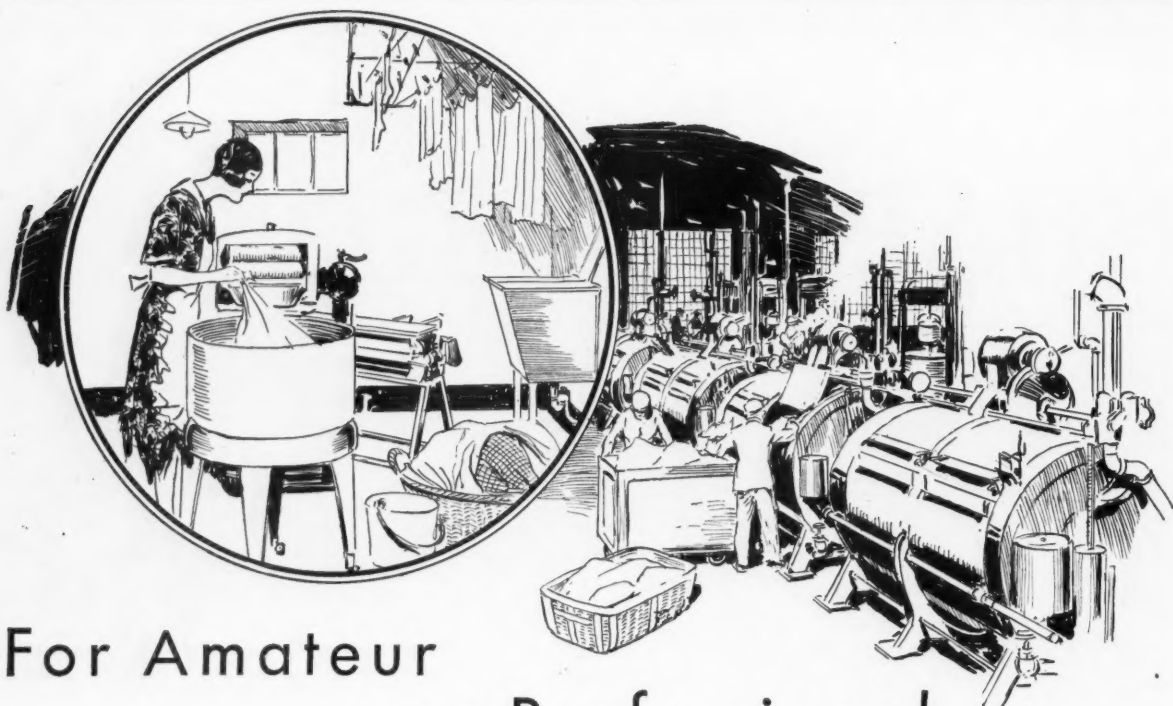
Also makers of a new line of soap machinery. Get our complete list and prices on this new equipment! All used machinery is sold as absolutely guaranteed in first class working condition. Everything listed here is ready for immediate shipment.

NEWMAN TALLOW & SOAP MACHINERY CO.

1051 WEST 35TH STREET
CHICAGO, ILL.

Our Forty Years of Soap Experience can help solve your Soap Problems

Say you saw it in SOAP!



For Amateur or Professional

WHETHER used in the home laundry or in the large public laundries, soaps containing Hercules I Wood Rosin prove their value. These soaps help clean everything from table linen to overalls. Hercules I Wood Rosin as a soap ingredient has been extensively and conclusively tested. This rosin is clean and free from dirt, and the color and aging properties of soaps made from it are good.

Hercules I Wood Rosin is sold on a net-weight basis in wooden barrels or galvanized drums, or on a gross-weight basis in wooden barrels.



Wood Rosin
Nitrocellulose
Ethyl Abietate
Alpha Terpineol
Chemical Cotton
Steam-distilled Wood
Turpentine
Steam-distilled Pine Oil
Commercial Abietic Acid .

NAVAL STORES DEPARTMENT

HERCULES POWDER COMPANY
INCORPORATED

961 MARKET STREET

WILMINGTON, DELAWARE

Chicago

New York

Branch Offices:
St. Louis

Salt Lake City

San Francisco

Please send me a sample of Hercules I Wood Rosin.

Name _____ Company _____
Street _____ City _____ State _____

GG-11

Say you saw it in SOAP!



FALCON

QUALITY PRODUCTS

REAL quality in sanitary supplies is appreciated even in these days of price buying—*especially when quality products are available at competitive prices.* That is why you can offer your customers *truest economy* with Falcon Floor Cleaning Compounds, Liquid Toilet Soaps and Deodorizing Products.



The many fine, new and expensive types of flooring in use in modern buildings make necessary the use of proper cleaning methods to preserve and beautify them. In the Falcon Line there is *just the right type of Scrubbing Compound or of Liquid Wax for use on each new type of floor—and to meet any price requirement.* Falcon Liquid Toilet Soaps are pure, uniform and dependable. Get our latest price list and learn more about our products.

Write for Samples.



EAGLE

SOAP CORPORATION

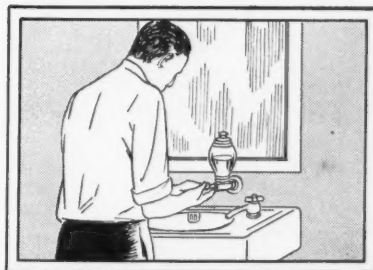
25 E. Jackson Blvd., Chicago, Illinois

FLOOR CLEANING COMPOUNDS

For Real Economy

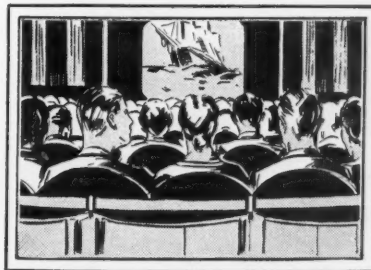


Sell your customers the right cleanser for their new floors and you will gain their everlasting gratitude. There is a Falcon product for every floor.



LIQUID TOILET SOAPS

Buy Falcon Liquid Toilet Soap in the concentrated grade, 40% true soap solids, to make the finest liquid toilet soap, pure, soothing and mild, in any degree of concentration, at any price per gallon.



DEODORIZING PRODUCTS

Falcon Deodorizing Blocs, Crystals and Blockettes evaporate uniformly, and efficiently recondition the air.

Say you saw it in SOAP!

BASIC MATERIALS

for

Soap Perfuming

▼▼▼▼

WE ARE headquarters for all of the more important synthetics and isolates used in soap perfuming. Included among these are:

Rhodinol

Geraniol "S"

Linalol Bois de Rose

Benzyl Acetate F. F. C.

Violae (Ionone)

Linalyl Acetate 75%

Linalyl Acetate 92%

Iriszone (Methyl Ionone)

THE UNGERER standard of quality for basic materials has long been recognized by the American perfume and soap manufacturer. We solicit your inquiries for testing samples and current quotations.



UNGERER & CO.

13-15 West 20th Street
NEW YORK

Say you saw it in SOAP!

SOAP

VOLUME SEVEN

NUMBER TEN

Announcement

EFFECTIVE with the November issues, *Oil & Fat Industries* will be combined with *Soap* as a special bound-in section. The circulation of the two publications will be consolidated. There will be no change in *Soap* as it is at present published, except the addition of the Oil and Fat Section. No change in make up, policies, or personnel of *Oil & Fat Industries* will be made. This publication, which for a number of years has enjoyed a reputation as the outstanding technical publication of the American oil, fat and allied industries, will retain all of its present features as a part of *Soap*. In a single larger paper for the closely allied interests of the oil, fat, soap, and sanitary products industries, it will be possible to produce a magazine more complete and better able to serve the fields which it covers.

Wage Cuts

ALTHOUGH the announcement last week of a cut in wages and salaries by one of the leading American soap manufacturers came unexpectedly at that time, the reduction is not altogether a surprise. The reason given by the company for the reduction was "to bring costs of production and distribution in line with prevailing economic conditions." The cut leaves wages still above the levels of 1928 and 1929 in their purchasing power.

The temporary abnormal spread between raw material costs and selling prices of soap products has been and still is shrink-

ing steadily. A readjustment of production costs to new and changing conditions is a necessity, not so much because of immediate considerations, but mostly because of a realignment of material costs which is bound to come.

We see this wage cut as a stabilizing influence from which the employes of the company will benefit in assured employment in months to come. We see it made at a time when, because of the increased purchasing power of the dollar, it causes no distress. We see it as a deliberate step taken now as a means of avoiding the possibility of later drastic and hasty action. Theorists may prate of the real lack of necessity for wage cuts, but hard-headed experience knows that they must come. To make them moderately and sanely before they may be forced by immediate necessity, is unquestionably a sound policy.

Cheap Yellow Soap

WITH what reason or logic, leading American soap manufacturers can flood the market with cheap unwrapped yellow laundry soap, is difficult to perceive. In various parts of the country, carloads of this low-priced rosin laundry soap have been dumped and are fighting viciously for consumer demand. The peculiar part of the whole thing is that this soap is being marketed by the very manufacturers who have spent fortunes in advertising their quality brands over a long period of years. They are competing mostly with their own advertised products, killing their sale, and

giving the consumer a taste for merchandise which tends to defeat the very purpose of all their millions spent for advertising. Frankly, we believe this meeting the "demand of the moment" in a sort of panicky follow-the-leader fashion is about one of the worst pieces of shortsighted business we have viewed in a long time.

Alkali Designations

ONE of the leading alkali producers has announced that its products will hereafter be designated in percentages according to their actual content of sodium hydroxide and sodium carbonate. The old designations which have been used for some years in the trade of 76 per cent caustic soda and 58 per cent soda ash, both based on the equivalent of Na_2O , will be abandoned by the manufacturer. In its place, the designation, 98-100 per cent will be used for caustic soda, indicating the actual content of NaOH , and 99-100 per cent for soda ash, indicating the actual amount of anhydrous sodium carbonate present. The object of the change is to make the designations less vague, more readily understandable, and actually descriptive of the products.

Some five years or so ago, a similar change in designation was proposed and taken up by one or two of the leading alkali producers. However, use of the more modern terms never became general, and after a time, the whole matter died out and the old forms continued as trade practice. Now, a leading producer has adopted the direct designations. There is no doubt but that it is a sensible step, one which should go toward simplification of trade terms. No sound reason exists for basing soda ash or caustic soda designations on their equivalent of sodium oxide. The products being bought and sold are carbonate and hydroxide. Then, why not designate them uniformly based on their actual content of these products?

Soap and a Message to Garcia

SOAP salesman, writer, war correspondent,—Elbert Hubbard spent twenty years during the earlier part of his life as a soap salesman. He was one of the found-

ers of the Larkin Company with his brother-in-law, John D. Larkin. He quit the soap business in 1893, and it was for his literary work thereafter that he became a national figure. This little-known part of his life is told in an unusually interesting story in the last issue of "Printers' Ink Monthly" by a son of his youngest sister. We have reproduced much of the story in this issue. Probably some of the old-timers in the industry may be able to look back far enough to remember this energetic youth who is supposed to have introduced the plan of selling the housewife her soap direct a case at a time with a fancy kerosene lamp or a desk thrown in as a premium. What has taken place in the Larkin organization during the past forty years since Hubbard sold out his half of the business to John D. Larkin is soap industry history.

Scared Stiff!

WE have seen small children thrown into a panic of fear by some not unusual happening which they failed to understand. However, the sight of full-grown business men reacting in a similar manner in an economic crisis does not carry with it the excuse of immaturity. The fear that some unknown, mysterious force of destruction is at work has brought a rush for cover like that of rabbits scurrying for their burrows. Fear has warped the normal mental processes of the average American business man, and in nine cases out of ten that fear arises not from causes within his own business, but from the story which has been told daily over the ticker from the New York Stock Exchange.

Until this wave of fear spends itself, we cannot have confidence and we will not have normal buying even among the great mass of people who can still well afford to buy. Until holders of securities and producers of commodities quit throwing them out of the window for a fraction of what they are worth, business will continue flat on its back. When our bankers cease opening their vaults with shaky hands every morning, and recover their nerve, there will be a return to financial and economic reason.

Hubbard, the conservative business man, just before he sold out his half of the soap business to his brother-in-law, John D. Larkin, in 1893



ELBERT HUBBARD— Soap Salesman

FEW people remember Elbert Hubbard as a soap salesman. They know him, perhaps, as the author of "The Message to Garcia," or as the compiler of the widely distributed "Elbert Hubbard's Scrap Book," but the story of his revolutionizing contributions to the art of soap merchandising has, until recently, never been told. Elbert Hubbard spent twenty years of his life in the soap business, starting in as a boy of sixteen in 1872, and retiring in 1893 when John Larkin bought out his fifty per cent interest in John D. Larkin & Co. During that eventful twenty years, he introduced the "factory-to-family" merchandising plan, persuaded users to buy soap in bulk rather than in single units, and in the working out of these plans pushed John D. Larkin & Co. into a position of considerable prominence in the soap industry. His tremendous energy, ready flow of keen productive ideas and boundless enthusiasm for any work in which he found himself engaged were all qualities which in this day would probably make him fitted for the position of sales manager of one of our leading soap manufacturing concerns.

"Elbert Hubbard started in the soap business in the employ of an older cousin, Justus Weller, who had a factory in Chicago. En route from Chicago to St. Louis, Weller had stopped off in Hudson, Ill., in the spring of 1872 to pay a visit to Dr. Silas Hubbard. The doctor's only son, Bert, was a strapping sixteen-year old boy, who

TWENTY years in the soap business—the original partner of John D. Larkin—an originator of many soap merchandising ideas—of this period in the life of the versatile Elbert Hubbard, American writer, little had been generally known until the story was told recently by his nephew, Horton Hubbard Heath, in the October issue of *Printers' Ink Monthly*. Mr. Heath, at present a partner in the United Advertising Agency, New York, is a son of Mary Hubbard, Elbert Hubbard's youngest sister. It is interesting to note that Mr. Heath is also a nephew by marriage of John D. Larkin, Mr. Larkin having married an older sister of Elbert Hubbard. Although Hubbard retired from the business in 1893, Larkin carried on to build one of the leading American soap organizations.—The Editors.

had worked by the day for nearby farmers, and did all the chores for a household of seven. The boy's sparkling black eyes and ready smile must have convinced Weller that here was an embryo salesman whose talents were going to waste. His description of the pleasure and profit to be found by an itinerant vendor of soap fell on eager ears, and before he left he had promised to send a shipment to the town of Bloomington, eight miles dis-



John D. Larkin, who became one of America's leading soap manufacturers, senior partner in the soap business with Hubbard, from a photograph taken in 1885

tant, for which Bert would try to find customers.

"Followed weeks of preparation. The Hubbard spring wagon was freshly painted; tastily lettered in blue and gold on its side was the legend:

'J. Weller & Co., Practical Soaps'

"And so, in a new suit of ready-made clothes, a new gray felt hat with brim turned up all around, and with father, mother and sisters waving good-bye from the gate of the white picket fence, off started Elbert Hubbard, salesman.

"Starting in nearby towns, Hubbard soon became a successful house-to-house salesman. As a matter of fact, he did not refer to his work as selling." He and fellow-members of sales crews called it "soap-slinging." The soap-slinger walked up the front steps of a house carrying a box of soap under his arm. With Hubbard's firm it was a box of twelve cakes of toilet soap, 50 cents a box. When the door opened the soap-slinger spoke and acted with rapidity. "For the lady of the house," he said, made a short forward pass with the box, and hastened down the front steps and away. Three days later the salesman called again to collect his money or his soap, as the case might be.

JUSTUS WELLER had a junior partner named John D. Larkin who was later to enter into even closer business and personal relationships with Hubbard. When the Weller-Larkin partnership broke up in 1875 Larkin set up a soap factory in Buffalo, taking with him the young and promising salesman, Hubbard. Larkin had married Elbert's sister in 1874, and the business

began to take on a family aspect. Hubbard was taken into the firm in 1878 and was given a one-third interest in the unincorporated copartnership, which went under the name of J. D. Larkin & Co. Later Hubbard's interest was increased to forty per cent, and before he retired in 1893 he was an equal partner with Larkin. The men made a very good business team, serving as mutual checks and supplements. Larkin was unimaginative, cautious, retentive, methodical. Hubbard's mind was creative, daring, tempestuous.

Three other men who were Hubbard's business associates for many years joined the Larkin soap business in its early days, and all three served their apprenticeship slinging soap. William and Daniel Coss, as the business grew, devoted themselves to the manufacturing end. Darwin D. Martin became secretary of the company, and after Hubbard's withdrawal was sales manager.

It was Hubbard who conceived the ideas which were to mean the success of the company, and Larkin who prevented unjudicious moves, held the company together, and eventually received the more substantial share of the profits which followed on success. Our interest is chiefly in Hubbard—the man with new ideas.

"As a sales promotional method, the crude consignment plan known as soap-slinging had its limitations. By 1879 J. D. Larkin & Co., had three trained crews in various parts of the country all the time, the business had grown, and the routine of slinging was almost entirely responsible for its growth. But it was not a plan conducive to repeat business. Anyway, Hubbard was tired of soap-slinging. He wanted something new. In 1879 he set his salesmen to selling their old enemy, the retail grocer. It was a field unfamiliar both to Hubbard and his men. Their technique was for the consumer, not the trade, and they had to learn a new language. They floundered for a couple of years, and the partners grew worried.

"Then Hubbard had an inspiration. In 1881 a dime was a medium of exchange, and not just carfare. Ten cents was the universal price unit, above which any common article might be justly classed as high-priced. Hubbard had the factory pack three cakes of toilet soap, in a box, the box to retail at 10 cents. It was a new idea in merchandising. Soap was something you bought by the cake, just as you bought crackers, coffee, or sugar by the pound, out of a barrel. Larkin's Crème Oatmeal soap, 10 cents per box of three cakes, went over big. It made a hit with grocers; it fascinated their customers. The grocer paid 7½ cents for the box, and never having heard of overhead expense, was amply compen-

sated. The public fell for the package idea and has never since escaped it.

"The Larkin factory at this time was a frame building, fifty feet wide and eighty-four feet long. Its equipment consisted of a six horse-power steam engine that rocked the building, two soap kettles and two hand presses. The 10-cent box of soap put the establishment on its feet. The kettles and presses worked night and day for three years. Larkin and Hubbard were jubilant. Hubbard busily composed handbills and display cards for stores. With each invoice for Crème Oatmeal soap he mailed the grocer a letter printed in facsimile handwriting, containing words of advice quite in line with present-day merchandising technique:

... While we would not have our friends think that we expect them to slight every other article in their stores for the sake of selling "Crème," we respectfully call your attention to the great advantage and necessity of giving these goods a little extra attention. If you will take the soap out of cases—pile it up in your store where everyone can see it—hang up the show-cards and make good use of the printed matter, it will sell very rapidly. And while it gives you a good profit (33 1-3 per cent) it will also please your customers—attract much attention to your store and advertise and increase the sale of your staple goods which require no display.

"Whether or not something you buy for 7 1/2 cents and sell for 10 brings you a 33 1-3 per cent profit simply depends on your point of view.

"Hubbard soon began to supplement the efforts of his traveling salesmen with solicitations to grocers by mail, and as time went on he came more and more to rely upon form letters as a means of getting business. Any grocer who would order a gross of three-cake boxes of toilet soap at a time was offered an exclusive agency in his community. J. D. Larkin & Co. was manufacturing a variety of soaps and washing compounds by this time, and the 'exclusive' grocer was apt to find an unexpected consignment of various other products accompanying his ordered gross of toilet soap when it arrived.

"Mr. Larkin watched the kettles, watched the books, and watched the business grow. He discreetly, if at times with foreboding, gave his restless brother-in-law free rein. In 1885 Elbert's proclivity for letter-writing put the company into the mail-order business. It was then that J. D. Larkin & Co. sent out its first 'factory-to-family' circular. It offered to the householder 100 bars of Sweet Home laundry soap, five boxes of toilet soap, six packages of washing compound, a bottle of perfume, and other sundries, all for \$6. The assortment was called a 'combination box of Sweet Home soap' on the basis that the price represented the value of the laundry soap alone and

the other articles were free. The mailing met with success, and Hubbard began to lose interest in the grocer. He had assumed that he would retain all his merchant trade, and that the factory-to-family business would be a purely additional source of revenue. Business with grocers was continued for several years, but 'factory-to-family' quickly took the center of the stage and never left it.

"It was not long before Hubbard enhanced the attractions of his 'mammoth combination box' by the addition of 'Six Solid Silver Tea Spoons (given to introduce our soaps) plain pattern, will last a lifetime; such as your grandmother used.' Unkind persons have asserted that while the original spoons were solid silver, it was the variation from sterling known as German Silver; however, this was a minor technicality before the days of the Federal Trade Commission. In 1888 Hubbard began placing advertisements in newspapers and religious publications through the advertising agency of Edwin Alden & Co., in Cincinnati, offering the \$6 combination box to a wider public. In the year 1889 J. D. Larkin & Co. sold 91,000 of the boxes.

"Mr. Larkin was impressed and Elbert Hubbard
(Turn to Page 113)



Elbert Hubbard as a dashing blade of 25 years and a successful house-to-house soap salesman. Photograph taken in 1881. Some 35 years later, Hubbard, the war correspondent, went down when the "Lusitania" was torpedoed



CHIRIS' ESTATE AT PUBERCLAIRE

Stress has frequently been laid at harvest time, on the unfavorable circumstances against which *Lavender* has to contend when growing in a wild state. We all know, and therefore appreciate the painful labor of the harvester, who has to travel "over hill and dale" to cut the scented flowers.

The House of "CHIRIS" has started, over a period of a number of years, extensive Lavender Plantations with the object in view of surrounding the plant with all necessary attention and, if possible, reducing the cost-price of the oil; to prevent the alternation of good and bad harvests, and finally to foster the multiplication of prolific plants of good quality.

Above is pictured the three hundred acre "CHIRIS" *Lavender Estate* at *Puberclaire*. Lavender Estates and production units are also maintained at *La Roque-Esclapon*, and *Barreme*. As important producers of LAVENDER OIL, the House of "CHIRIS" has set standards in quality which are second to none.

We solicit your inquiries for our,

OIL LAVENDER FLEUR BARREME 50% ESTER
OIL LAVENDER FLEUR PUBERCLAIRE 40% ESTER
OIL LAVENDER FLEUR EXTRA 36% ESTER
OIL LAVENDER FLEUR MT. BLANC 30/32% ESTER

Also our new specialty,

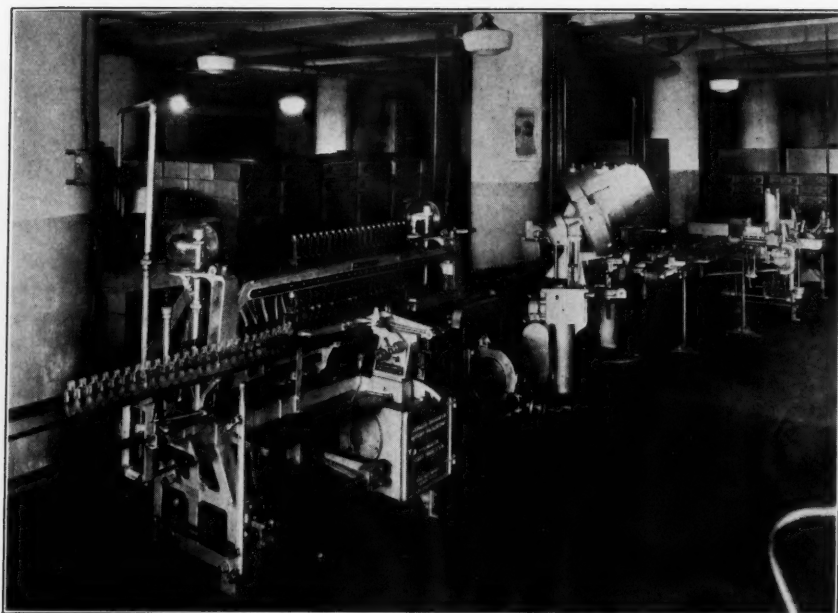
LAVENDER CONCRETE PLANTATIONS

ANTOINE CHIRIS COMPANY

147-153 Waverly Place

New York

Say you saw it in SOAP!



The straight production line means lowered costs. Congested and cluttered up floor space is costly. Repeated handling and restacking between operations takes that much off the profits

Now Is the Time to **REDUCE YOUR COSTS**

BY FRANCIS CHILSON

LIKE the poor in the proverb, production costs we have always with us. Many of us complain about high costs,—and do little else about them. When business is good and profits reasonably high, little attention is paid to costs. A fraction of a cent or even a full cent more or less spent in the production of an article which is profitable, is regarded as of little consequence. But when business is less easy, the shoe begins to pinch enough to attract worried attention.

There are two ways of increasing profit: the first, by increasing the volume of business done on a given investment; second, by persistently studying ways and means of lowering costs. By "costs" is meant, of course, all business expenditures including those for merchandising. We will concern ourselves here, however, specifically with the lowering of production costs only, and the establishment of means for controlling them.

The causes of high costs are many and varied and all of them are due to some failure in man-

agement. Many plants are outgrowths from small hole-in-the-wall affairs. A chemist, or even more likely, a man without any technical training of any kind, gets hold of a formula for an insecticide, a disinfectant, a liquid soap, a shampoo, or a furniture polish and begins to manufacture it in a small way on his own or a limited amount of borrowed capital. Such men, when they are successful, are usually gifted with merchandising vision. They see their product in a million homes. Hence, at the beginning, the emphasis is, as it should be, placed on merchandising. But as the business grows, adjustment is necessary. Larger expenditures for advertising and other merchandising expenses must be made, and costs thus become a factor to be reckoned with. These enterprises grow pretty much like Topsy,—machines are added and departments expanded more or less haphazardly, until finally, through increasing competition or recurring depression, it is discovered that production costs are out of line.

Times out of number, analysis will show that high factory costs are due to excessive overhead. With certain exceptions, the cost of raw and packaging materials can be ruled out. The market to a large extent determines the actual cost of a given quantity of raw material, and this cost can be lowered but little without depreciation of quality. Packaging material costs are determined by the design and the quantities purchased. Hence, for an established package, costs cannot be lowered. Packaging material costs can, however, be lowered substantially through proper design as we shall hereafter show.

Our attention is then directed to high labor and high overhead costs. Right here, it may be stated that the amount of wages paid is not the cause of high labor costs. The writer has seen numerous cases of extremely high labor costs in factories in which the wage scale was extremely low. Basically, the reason for high labor cost is due to the failure to utilize labor effectively through proper co-ordination of production.

Workers are not taught how to work. They usually are broken in by other experienced workers and left to their own devices as to the best means of doing given tasks. This is very much like sitting a child at a piano and letting her discover the best means of playing it. A striking example of what can be accomplished by teaching workers how to work was described recently in *The New York Times* by Charles M. Schwab. A worker in a steel plant was absolutely convinced that he could shovel no more than a ton of ore a day under any circumstances. And the man was known to be a good, honest worker. He was then shown how to work by a motion study expert, and when Schwab passed that way again, he found the same man shoveling three tons of ore without any more physical effort. Of course in this instance, a bonus played an important part, but regardless of the bonus, it would not have been possible for the man to triple his output unless he had been shown *how* to do it.

There is always a best way to do every job. It is not reasonable to expect the worker himself to discover that way. The most efficient way to do each and every job in the plant must be known to the plant manager, and it is his duty to see to it that all workers conform to the best procedure. Even the operation of a filling or a labeling machine can be inefficient when the worker is permitted to use her own judgment. Because of failure to train workers properly, and also because of the fact that the operation of equipment is at their discretion, production is frequently stopped for one reason or another. Very often too, machines get out of order because workers are not sufficiently familiar with their operation to call the attention of the forelady to the fact

that something is wrong. Consequently, there is a breakdown which stops production until the machines are repaired. In too many plants, the machines are adapted to the worker instead of the reverse.

HIGH overhead costs are, in most instance, due to faulty co-ordination of production. Ideally, production should flow smoothly through the plant in a straight line from raw material store rooms to finished stock rooms. In most instances, production proceeds by tacking like a boat sailing against the wind. The operations are not performed in their logical sequence; production does not flow in a straight line. There is much rehandling and stacking between operations and many interruptions due to stopping machines for one reason or another. The operation of labeling machines for example is likely to be inefficient if improper glue is used; operators may be compelled to stop the machines too frequently to wipe off the picker plates. Sometimes machines are stopped through faults in the design of caps and labels as will be discussed also.

Under such conditions, inventories of both packaging materials and finished products are certain to be too high in total investment and possibly too low in certain individual items. Back-orders in plants (particularly those which produce several products) are a constant source of trouble. It seems paradoxical that an inventory can be high with respect to the money invested and yet be afflicted with the curse of back-orders, but it is true. Sometimes back orders cause so much trouble that a policy is adopted to provide for the maintenance of maximum inventories, a procedure far from economical. Every dollar invested in inventories is just one more dollar of capital in suspended animation. The inventories of many insecticide houses are twice the amount they should be and in some instances more than that.

Another factor accounting for high overhead and labor costs is the failure to schedule or plan production properly. Batches of goods are made up and started through the packaging operations, and no two batches, of exactly the same quantity, ever come through in the same time. Why? In many cases, it is left to the foreman who makes the goods to decide when he will make it, and to the forelady of the packaging floor when she will run it and in what order.

The location of the plant itself is another important factor in costs. Because of low rents many manufacturers locate in out of the way areas, far from rail terminals and equally far from markets. In such locations additional handling and trucking costs usually offset the advantages of low rents.

IN the growth of a business, many experiments in machinery are tried. The usual soap or insecticide plant is frequently an assortment of various kinds of equipment of all makes, none of it synchronized and most of it badly laid out. You will find hand operations and machine operations intermingling. On the other hand, plants will be found in which the packaging equipment is efficient from filling to labeling. The production line is extremely efficient,—once the product has been brought to it. It often happens that an efficient up-to-date packaging line will be found in an otherwise inefficient plant. The manufacturing department is badly laid out, the handling of packaging materials up to the head of the packaging line is haphazard, usually being brought thither on a truck by a roustabout, and the handling of the finished product is likewise disorderly. The usual condition of such plants is one of acute congestion. Trucks of bottles or cans stand about all over, mingled with cases of caps or bags of corks. Trucks of finished product clutter up the aisles waiting to be hauled to the stock room or waiting for the elevator.

Package design is an important factor in costs, all too frequently overlooked. The construction of the package is important as to whether it can be capped easily by machinery. Since dispensing tops, nozzles, and spouts as a rule cannot be applied by machinery, the form of the container should be given careful consideration,—weighing carefully against each other the convenience of the user and the convenience of production. Sometimes a happy compromise is effected by using a combination package which includes a device for the spraying or application of the product. In this case it is possible to design an efficient production package. The design of the labels should be carefully considered to avoid hold-ups in production through the locking of the labels together in the label magazines, smudging through use of improper printing inks, finger marking, tearing, etc. The questions to be asked of a new design are,—does it fit into our production scheme? Is it appealing from a consumer's standpoint? Is it convenient for the ultimate consumer to use? *Flit* is a good example of an effective package. *Whiz* is a good example of a furniture polish package. *Super Suds* is a particularly good example of an ideal package combining both pulling power and production practicability.

HAVING made a study of the situation as it is, what is to be done about it? The first step is to put your house in order. The flow of production should be studied from the moment the raw and packaging materials enter the plant until finished products leave the plant. Store-rooms, departments and equipment should then be rear-

ranged so that the flow of production is never impeded and never has to back-track. The machinery should be re-arranged so that consecutive operations are performed in consecutive order and provision made for suitable conveyors to handle the product between operations. Racks and tables should be eliminated wherever possible.

The method of handling packaging materials and also finished stock should be carefully studied to determine whether conveyors can be installed to supplant trucks. In some layouts this is not possible, but otherwise it is always desirable to use conveyors. Roller conveyors can be used to bring cases of bottles or cans to the filling machines and similar conveyors can be arranged to carry the finished products to the stock rooms. Trucks require labor to push them and are therefore an expensive way to handle materials. When trucks must be used, the possibilities and convenience of lift trucks should be given careful attention,—these trucks have the virtue of saving rehandling for stacking. The writer has seen lift trucks used in a manner to supplant stock bins entirely. The platforms were brought to the stock room and stacked by means of portable elevators on specially constructed steel tiers.

THE second step involves the establishment of operation standards. That is, every operation,—yes, every motion, should be studied to discover the easiest and best way to handle the product at each stage of production. Then each operation should be standardized and workers taught to perform it in just that manner. These standards, together with the formulæ, list of packaging materials, and all other detailed information should be written up and kept in the production office. When a standard has thus been set for the production of a given product, the factory manager has a time gauge by which to plan production and to control costs.

The fourth step consists in the use of production schedules. Regardless of how small the business is, production should be carefully worked out in advance in writing. In order to plan intelligently, it is necessary to have an analysis of sales by item. The analysis should be comparative to show sales trends by months and seasons. This information should be kept on the schedule sheet, which must indicate also, the size of the batches and the number of items each will produce and also the inventories of finished stock and packaging materials. It should record also the maximum time required to get out a batch of goods according to established standards, and it should also indicate the amount of time required to get deliveries of packaging materials. By

(Turn to Page 75)

The Purchasing Power of the Dollar

In current business and economic discussions the Purchasing Power of The Dollar is much in the limelight.

Are you getting your full dollar's worth every time you spend a dollar for DECOLORIZING CARBON? Remember—price alone is not of major importance. True value is units of work done per unit cost.

Play safe—and order only DARCO for your decolorizing carbon requirements. Then you can rest assured that your Dollar has exercised its full Purchasing Power.

This Trade-mark



On Every Carton

"IT GOES FURTHER"

DARCO SALES CORPORATION
45 East 42nd Street
New York, N. Y.

Telephone:
Vanderbilt 3—1592

Cable Address:
DARCOSALE, NEW YORK

Say you saw it in SOAP!

The Measurement of RANCIDITY REACTIONS

BY KURT TAUFEL AND JOSEF MULLER*

IT HAS been lately shown¹ that the deterioration of oleic acid or "oleic rancidity" of fats is exclusively a chemical process, which according to A. Tschirch and A. Barben², as well as according to W. C. Powick³ consists primarily of an autoxidation of the reactive double bonds of the unsaturated glycerides; peroxides are formed, concerning the structure or kind of which almost nothing is known. The record step which follows (influenced by many factors—light, moisture and positive and negative catalysts) depends upon the splitting off of the fugitive or "in-between" products. The way in which this decomposition actually occurs and the kind of products so formed, of which we so far know very little, can be one of many possibilities. But fundamentally, it has been pretty well established that the predominating processes are the formation of low molecular substances having acidic, aldehydic and ketonic characteristics. The glyceryl part of the molecule does not appear to enter the reaction. The primary or oxidative and the secondary or compound-forming phases appear to proceed simultaneously. In fats, the material reacting thus is but a minute part of the whole. It is not clear which of the products so formed are responsible for the rancid odor. Scala⁴ as well as Powick (*loc. cit.*) gives the most importance to heptaldehyde.

When one considers the complicated reaction mechanism involved in the spoilage of fats, it is small wonder that the practical chemist has great difficulty in the detection of incipient rancidity. When the spoilage has gone so far as to be readily apparent, then one can throw any detection method aside. The practical need for such a detection method is in the identification of the beginning of rancidity, where it is not in fact obvious otherwise.

An investigation into the mechanism of the spoilage process bespeaks the necessity of a quantitative method of analysis. It does not need to be emphasized that no far-reaching results may be expected under the existing state of affairs. One must therefore be content to use such ap-

proximations which although relative will give reproducible results. As a basis for such procedures the following possibilities are to be considered:

(1) Establishment of the variation of the index numbers, e.g., acid, iodine, saponification, acetylation-numbers, etc.

(2) Identification and measurement of the moloxide with peroxide character, produced by autoxidation.

(3) Identification and measurement of the decomposition products which are produced by mild oxidation.

(4) Identification and determination of the aldehydes formed.

The use of the change of index numbers as a measure of the degree of spoilage is not of reliable value since the measurements are uncertain. Also the development of oxidation products with peroxide character (with KI starch or titanium sulfate, etc.) is only a crude expression for spoilage. However, one must reckon with the fact that such moloxides (peroxides) have not been found sometimes even in rancid fats.

Every method has assumed a definite meaning which is based upon oxidizability of the liquids formed by the spoilage of fats or upon the water soluble decomposition products⁵. Several procedures have been worked out for this purpose. The disadvantages of these methods lay in the fact that a normal fat always gives a certain "oxidation-number" which increases with spoilage, so that it is difficult to show a limit or boundary⁶; then when the fat is strongly rancid and when the liquid aldehydes are oxidized to the acids, the "oxidation-number" is lowered.

Every process for measuring rancidity which depends upon the general detection of aldehydes appears equally inadequate. For this purpose, von Fellenberg⁷ has developed a method which depends upon the unusually sensitive color reaction of fuchsine with aldehydes. He graded the depth of color against a solution of 2 mg. acet-aldehyde in 100 cc. oil, which corresponds to 0.8 mg. potassium permanganate in 100 cc. water. The disadvantage lies in the fact that the reagent

*In *Zeitschrift Untersuchung Lebensmittel*, 60, 473. Translated by Lowell B. Kilgore.

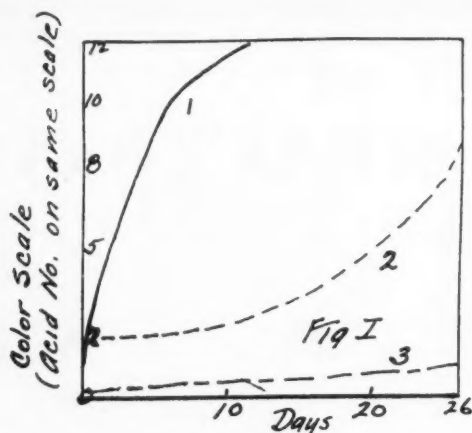


Fig. I—Variation of the Kreis Number and the Acid Number during the rancidification of the ethyl ester of the oleic acid, in the light and in the dark. Curve 1. Kreis color in the light. Curve 2. Acid Number in the light. Curve 3. Kreis Color in the dark. The increase in the acid number was very slight and was used as the basis of the above graph.

is insufficiently defined and any attempt to use it as a quantitative reagent is uncertain.⁸

The Kreis reaction is sharply differentiated from such a specific group reaction as the von Fellenberg reaction. Its mechanism has been clarified by Powick. The precursor of this reaction is epihydrine aldehyde. A detection is here advanced in that one of the many possible aldehydes would enter into the reaction as characteristic of oleic-rancidity, and it is clear that a method of measuring such a reaction exactly might be of value. That given above from the literature is not without contradiction. It appeared to us, therefore, that the investigation of the mechanism of rancidity should be preceded by bringing together certain methods. This will be the nature of this investigation.

Primary Rancidity

AUTOXIDATION, i.e., oxygen absorption, is, as already mentioned, the primary step in the course of the rancidity process. Therefore it appeared that a relation between the oxygen absorption and the degree of rancidity should be looked for. This has been studied in the field of the drying oils, but only a little in the general field of the spoilage of glycerides.

The Kreis reaction has been used as a phloroglucinol-ether reaction for the determination of the degree of spoilage, wherein the color developed was measured colorimetrically⁹. R. Kerr¹⁰ diluted the fat in question with kerosene or a paraffin until no color was developed in the test, and used the amount of dilution as a means of measuring the degree of rancidity. Holm and Greenbank¹¹ used a standard solution of methyl-

red in weak acid for a color standard; the Kreis reaction mixture was colored with this mixture to a certain tint as a measure of rancidity. Husa and Husa¹² used a similar method. Pritzker and Jungkunz¹³ attempted to develop a method of measuring directly the amount of epihydrine aldehyde produced. Since the aldehyde is unstable and its derivatives (e.g. acetols¹⁴) are troublesome to prepare, these authors used as a standard color solution a solution of 0.5 mg. acrolein which was oxidized with peroxide (thereby giving the intermediate epihydrine aldehyde) and then added a corresponding amount of 1 per

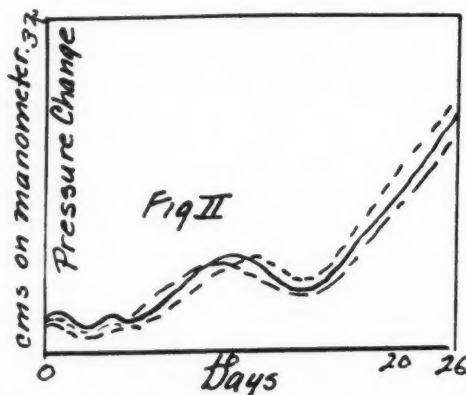


Fig. II—The measured variation in the pressure of Oxygen during its absorption by olive oil. The curve numbers are the same as in Fig. 1

cent phloroglucinol-ether solution. The color thus given corresponded to a solution of 1.2 mg. potassium permanganate in 100 cc. water.

This colorimetric procedure is based upon the quantitative intensity of the Kreis color which is considered by Powick to be caused by the epihydrine aldehyde which appears to parallel the formation of the heptaldehydes which are responsible for the formation of the bad odor and taste. Also Kerr and Sorber¹⁵ believe that of all possible reactions for the measurement of rancidity, the Kreis reaction is the best. On the other hand, Holm and Greenbank, as well as T. W. Jones¹⁶ hold that there is no simple relation between the degree of rancidity and the depth of color in the Kreis reaction. This contradiction provoked this investigation concerning the limitations of the reaction. The reaction was always carried out in the original manner: "1 cc. oil is shaken for one minute with 1 cc. hydrochloric acid (sp. g. 1.19); then 1 cc. of a one per cent ether solution of phloroglucinol is added and the mixture again shaken."

H. Ditz¹⁷ has shown that ether containing a trace of peroxides influences the spoilage reaction. The following investigation was made

in this direction on oil which originally showed a strong Kreis test.

TABLE I

Reaction mixture	Intensity of Color	Stability of Color
Oil without addition	strong	normal
Oil—1 drop peroxide	slightly weaker	"
"—2 drops "	somewhat "	"
"—3 " "	noticeably "	5 minutes
"—4 " "	weak color	1-2 "

This shows that so slight an amount of peroxide as might easily be present in fats could alter the color of the reaction. The action of the peroxide is the oxidation of the aldehydes formed by rancidification, also the epihydrine aldehyde, as can be shown by experiment.

Powick (*loc. cit.*) claims that the color reaction is a condensation between phloroglucinol and the epihydrine aldehyde present. The work of C. Counciler¹⁸, R. Bohm¹⁹ and especially A. Clowes and B. Tollens²⁰ shows that all of the aldehydes of the fatty series condense with phloroglucinol under the influence of strong acids to form condensation products without characteristic colors. This reaction is used for the quantitative measurement of known aldehydes (formaldehyde, furfural, methyl furfural, etc.)²¹. It is a possibility therefore that in the case of old rancid fats, the negative Kreis test is a result of such a case. In fact a precipitate has been noted in the case of

certain discrepancies between it and the von Fellenberg test. The fact that both tests are positive is no contradiction as other aldehydes and epihydrine may be present.

Quantitative Experiments

FROM the foregoing reports on the limits of the Kreis reaction, the conclusion is to be reached that there can be no generally binding proportionality between the depth of color and the degree of spoilage. On the other hand, a certain parallelism is to be expected in the early stages where the disturbances mentioned are not yet in evidence. Confining oneself to this domain, as the spoilage progresses, there is a deepening of the Kreis color. The spoilage reaction might therefore be employed in comparative investigations on the mechanism of the spoilage processes. After unsuccessful experiments to measure the depth of color of the phloroglucinol or resorcinol sample in a simple way, either oxidatively or by reduction, the following colorimetric process was finally worked out.

By carrying out the Kreis reaction with phloroglucinol on a series of samples of oleic acid ethyl-ester with varying degrees of rancidity²³, the fixed points of an empirical color scale were ascertained with the use of coloring matters as fast to light as possible²⁴. By accurate observation of the shading, a barely perceptible reddening was regarded as color gradation 1, such as that which takes place according to Kreis with freshly prepared oleic acid ethyl-ester. A color tint as one obtains it with a highly rancid sample of this ester was designated as color gradation 12. By choosing corresponding concentrations of the

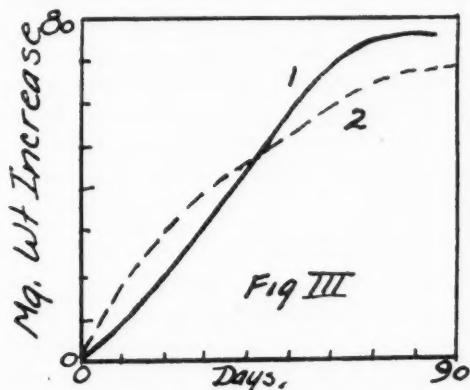


Fig. III—The increase in weight of ethyl-oleate and of oleic acid upon standing in air. 1. Ethyl oleate. 2. Oleic acid

certain very rancid fats when used for the test. In order to test this idea, a spoiled cottonseed oil and a rancid oleic-ethyl ester were used: formaldehyde, acetaldehyde, butyl, hexyl and heptyl-aldehydes were added. Only the results are given here, for details see²²:

The aldehydes gave a slightly colored condensation product, the higher the percentage of aldehydes, the lower the color intensity and the greater the amount of the precipitate. The lower the molecular weight of the aldehyde the more easily the condensation reaction took place and the more the disturbance of the color. This clears the failure of the Kreis test on old fats as well as

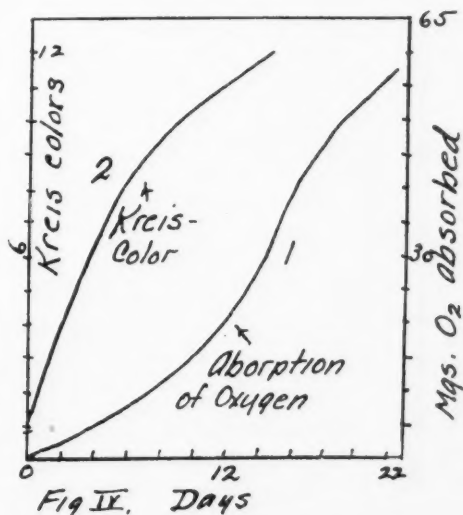


Fig. IV—Variation of ethyl oleate upon standing in the air as shown by a comparison of the weight increase and the depth of the Kreis color. Curve 1. Weight curve. Curve 2. Kreis color curve.

coloring matter used as standard, 10 stages were introduced between this interval, so that a 12-stage color scale was available. The colors themselves were dissolved in gelatin and these solutions were poured in reagent glasses of 15 mm. diameter and 80 mm. length. The glasses were hermetically sealed and when not in use were kept in a black container in order to prevent fading caused by exposure to light²⁵.

In order to work under uniform conditions in all the experiments, the reactions were carried out strictly in accordance with the directions for the Kreis reaction given in the "Schweinerischen Labensmittelbuch." The colorimetric color comparison was always made two minutes after the mixing of the reagents. In order to exclude the influence of the color inherent in the investigation material, the measurements were conducted in a colorimeter based on the Walpole principle.

In a series of investigations with the use of the method described it was found that the results are always reproducible within the given limits. Certain difficulties always occurred, of course, in case of the investigation of such natural fats whose own color was so strong that, notwithstanding the Walpole principle, its exclusion was only partially possible. Changes in the color tints therefore occur, and the measurement can be made only with some practice and experience. The process cannot be used with those products which are in a highly advanced stage of spoilage, where secondarily a decomposition of the epihydrine aldehyde is to be expected or where the aldehydes of the fatty acid series disturb or entirely prevent the reaction.

The experiments described were used to advantage in comparative investigations on the influence of positive and negative catalysts with respect to the rapidity of spoilage. A report on this matter will be made later on. One example will be given here. In the accompanying illustration 1, the behavior of a freshly prepared oleic acid ethyl-ester when kept in the light and in the dark with access to air, is graphically represented. Along with the measurement of the intensity of the Kreis color in its dependence on the duration of storage, the acid number is also frequently ascertained. From the course of the two curves a series of deductions can be arrived at which are already known for the most part but which in this case have a certain quantitative content.

(1) The spoilage of the oleic acid ethyl-ester occurs, judged not only by the deepening of the Kreis color but by the increase of the acid number, much more rapidly in the light than in the dark. The accelerating influence of light is very clearly manifested.

(2) There is no proportionality between the

Kreis color and the acid number. Whereas the Kreis color, rapidly increasing in the foregoing case even after 14 days, has attained the maximum depth of color ascertainable colorimetrically, the acid number increases much more slowly and then gradually attains a more rapid increase. The Kreis color permits the detection of spoilage even after a very short period of observation. On the other hand, a clearly noticeable increase of the acid number is not discernible until much later. This furnishes an explanation of the well-known fact that fats clearly spoiled according to the sensory test, do not always show noticeably increased acid numbers.

(3) The unusually rapid increase of the depth of color according to Kreis with an almost unchanged acid number at the same time, should be regarded for the present as an indication that the rancidification of the fat does not presuppose a previous saponification of the glyceride. On the contrary, the possibility is to be reckoned with that the autoxidation processes attack the unsaturated fatty acids in the molecular bond of the glyceride and thus bring about its decomposition. This conception, for the confirmation of which experiments are being made, finds a certain parallel in investigations of T. P. Hilditch and C. H. Ian²⁶. Both investigators succeeded in making a quantitative determination of the saturated glycerides of a fat by treating the unsaturated glycerides directly in acetone solution with pulverized potassium permanganate. The latter are oxidized, the former remain unchanged. A glyceride saponification therefore does not occur.

Oxygen Absorption in Rancidity

THE progress of drying with rancidification of the oils used in the different drying-oil processes (oil films give positive Kreis and v. Fellenberg reactions, according to special investigations; J. D. Ans²⁷, also S. Norzbacher²⁸ isolated decomposition products from linoxyn similar to those formed during spoilage) has already been abundantly studied with respect to the oxygen absorption occurring in this connection. Reference is made to investigations of V. Fahrion²⁹, A. Genthe³⁰, A. Bibner³¹ and co-workers, J. D. Ans and others. Similar ideas might be advanced with regard to the spoilage of the fats, but we shall only give data on isolated experiments. With respect to the increase in weight of the fats upon standing in the air, A. Scala³², G. W. Holm and G. D. Greenbank³³ maintain that the Kreis color intensity is dependent on the quantity of absorbed oxygen and that a marked proportionality does not exist between oxidation and rancidity. W. L. Davies³⁴ maintains that in spite of this discrepancy in the measurement of the oxygen ab-

sorption, this is the best method at the present time for following the progress of rancidity.

It seemed desirable to assemble other experiments in this connection. That a proportionality between oxygen absorption and degree of spoilage cannot be expected, should be quite apparent in the light of the foregoing explanation. It is also true that the measurement of the oxygen absorption, either volumetrically or gravimetrically, only approximates the real value with the ordinary processes because as the oxidation proceeds there is a breaking up of the molecule with simultaneous separation of gaseous products. Any attempt to overcome this lack of clarity led to extremely complicated experimental procedures. It is worthy of note that the oxygen absorption, which attains considerable proportions in the drying oils, must be relatively slight owing to the less unsaturated character in the fats and oils which are to be investigated.

The experiments made along this line first had to do with the volumetric measurements of the oxygen absorption according to the investigations of A. Genthe, and then with the gravimetric execution of this process.

(a) Volumetric experiments: The setting up of the apparatus was as follows: A glass tube 4 mm. wide was attached to an open manometer (length of side tube about 50 cm.) and coated with paraffin oil as sealing liquid. The manometer was inserted in an air-filled Erlenmeyer flask of about 1 liter content rendered impervious to gas by means of a rubber stopper. A roll of filter paper of 100 sq. meters surface held together by glass rings was inserted in the flask by means of a T shaped holder of glass and the filter paper was saturated with a certain quantity of the oil or ester to be investigated. 0.6 to 0.75 g. of substance were used. The oxygen absorption (from air) was recorded from the pressure changes on the manometer. In order to eliminate fluctuations caused by changes of temperature, pressure, etc., another experimental flask without investigation material was inserted, whose readings supplied the necessary corrections.

In several series of experiments with oleic acid ethyl-ester, olive oil, linseed oil, etc., the oxygen absorptions were followed according to this method and measured by the reduction in volume. It was found that it was scarcely possible to reproduce the results even within wide limits by the maintenance of uniform experimental conditions. For example, the same olive oil showed pressure-change curves in 3 similarly conducted experiments, which not only deviated from each other but whose course for the most part offers no plausible explanation. Certain factors are apparently present which cannot be grasped with the experimental technique used and therefore

render the results of no practical value. An effort was made to remove, by the addition of potassium hydroxide, the volatile acid products (carbon dioxide, formic acid, etc.) resulting from molecular decomposition, in order to obtain clearer ratios, but even this did not lead to any real progress. The pressure increase shown in illustration 2 occurring at the beginning of the experiments should be real. In the gravimetric experiments, a decrease in weight occurred. (See the later methods.)

Summing up, these results show that the volumetrically determined oxygen absorption is little adapted for the ascertainment of the degree of rancidity. This was also the reason for not placing these experiments in parallel lines with the Kreis reaction.

(b) Gravimetric Experiments: The experimental procedure was very simple. Equally weighed quantities (about 2 g.) of the investigation material were placed in light, shallow glass bowls which were weighed at proper intervals under bell jars (protection against dust, etc.), with free admission of air. Rather large quantities of oil were placed alongside these in bowls under the same experimental conditions in such a way that the surface and thickness of layer corresponded as far as possible to the weighing experiment. By so doing it was possible to execute the Kreis reaction along with the exchange of weight.

The results obtained from two experiments made in this way with oleic acid and oleic acid ethyl-ester are shown in Fig. III. It follows from these experiments that there is a considerable increase in weight within the observation period of 3 months. With the oleic acid a decrease in weight manifests itself³⁵ in the beginning and this is in agreement with the curves showing the weight increase of drying oils³⁶. After a certain period of time, the curves flatten out, as Fig. III shows. This would appear to indicate that with advancing oxidation the splitting of the molecule makes greater progress. More and more volatile decomposition products are formed whose escape counteracts an increase in weight.

By repeating the experiments, their approximate reproducibility could be shown. We used this measuring process to advantage in experiments on the influence of the rapidity of the spoilage processes through foreign substances. A comparison of measurement results according to the gravimetric and the colorimetric processes is shown in Fig. IV. It was a question there of an oleic acid ethyl-ester stored under the same experimental conditions.

From the two curves it may be seen, as many
(Turn to Page 111)

FOR YOUR PRIVATE LABEL

SOLVAY FLUF

(Trade Mark Registered)

Fluf makes an ideal cleanser to add to your line of products because it produces the largest package with the lightest weight. Fluf is an extra light soda ash made especially fluffy, bulky and light by a process exclusive with Solvay.

SOLVAY Super Cleanser

(Trade Mark Registered)

This ideal cleaner and cleanser for general cleaning is efficient, effective and entirely soluble in water. Super Cleanser contains no harmful ingredients nor inactive filler. It is *all active cleanser*. Solvay Super Cleanser is good enough to beat competition and can be sold at a profitable price.

SOLVAY Snowflake Crystals

(Trade Mark Registered)

Pure white, crystalline, immediately and entirely soluble, Solvay Snowflake Crystals is an excellent water softener and effective soap saver. Perfect solubility enables this mild cleanser to do its work without leaving a residue. Snowflake Crystals also makes the most perfect base for bath salts.

PUT Solvay quality into your packages and get more out of your private label trade. Write today for prices and booklet SC7.

SOLVAY SALES CORPORATION

*Alkalies and Chemical Products Manufactured by
The Solvay Process Company*

61 BROADWAY NEW YORK CITY
1881 50 Years of Solvay Leadership 1931



SOLVAY

PRODUCTS

Say you saw it in SOAP!

Soap and Oil Chemists Meet Oct. 29

THE soap and oil chemists of the country will meet the latter part of this month at Chicago. The Sixth Annual Fall Meeting of The American Oil Chemists' Society will convene at the Congress Hotel, Michigan Boulevard, Chicago, on Thursday and Friday, October 29 and 30. President A. S. Richardson, of Procter & Gamble Co. and the Chicago Local Arrangements Committee, W. H. Irwin, of Swift & Co., *Chairman*, promise that this year's Fall Meeting will be second to none in amount and quality of scientific material presented. John P. Harris, of Industrial Chemical Sales Co., *Chairman* of the Entertainment Committee, has arranged a mammoth bowling tournament and other attractive features which will insure a complete absence of dull moments. The interests of the ladies attending the meeting will be cared for by a special committee of Chicago ladies, headed by Mrs. Harris as *Chairman*.

There will be exhibits of chemicals, apparatus, machinery and supplies, of interest to all technical men associated with the oil and soap industries. The exhibits will be displayed in the Florentine Room of the Congress Hotel, where the sessions of the meeting will be held.

The excursions to manufacturing plants which have been arranged by the Local Committee will be of particular interest. Visits to the various packing plants and the stockyards and a trip to Hammond, Indiana, to inspect the new soap plant of Lever Brothers Company have been arranged. A visit to the famous Planetarium in Grant Park, Chicago, where the courses of the celestial bodies are represented in miniature, has also been provided for.

On the Saturday following the meeting there will be two important football games in Chicago, the Chicago-Purdue and the Northwestern-Illinois games. Those desiring tickets to attend either of these games are requested to write promptly to W. H. Irwin, Swift & Co., Chicago, who will secure tickets for the games. Mayor Andrew J. Cermak of Chicago has promised to attend the first session of the meeting, accompanied by the city's Official Greeter, Colonel Gaw. It is expected that both the Mayor and Colonel Gaw will address a few words of welcome to those attending the meeting.

One of the main entertainment features will be the annual bowling tournament in charge of John P. Harris. Such interest has been shown

in this tournament that nine entries have been received for five-man teams already, including the Swift Premiums, the Armour Stars, the Wilson Certified, the Industrial Chemical Nuchars, the Swift Vreams, the Armour Soap Works Luxors, the A. Daiggers, the Swift Silverleaves, and the Procter & Gamble Criscos. Entries are expected from the American Maize Products Company Amaizos, and the Lever Brothers Lux, so that the 12 alleys originally reserved appear to be insufficient and reservation has been made up to 18 alleys, at 235 South Wabash Avenue, and entertainment features will be provided so that everyone will have a good time. There will be alleys available for singles and two-men teams and for the ladies and there will be prizes for all and a surprise handicap, which will provide a lot of laughs.

It will assist the bowling committee greatly if the members will send in reservations for the alleys promptly, so that no one will be disappointed, because if the 18 alleys provided for do not prove sufficient, the committee wants to know in plenty of time to provide more. Please send reservations in at once to:

John P. Harris,
205 W. Wacker Drive—Room 1306,
Chicago, Illinois.

The Committee sincerely hopes that every chemist in attendance at the meeting will bowl with us as this will be a strictly informal bowling affair, so that it will not require those bowling to bring their own bowling ball or even their own bowling shoes, so if they happen to slide over the foul line a little bit, they are not going to be penalized, because the purpose of the occasion is just to get together in an informal way and there is no place where good fellowship can be promoted as it can on the bowling alleys. There will be plenty of prizes for all and the biggest prize of the evening will go to the winner of the surprise handicap, so that it is quite possible that one of the bowlers making a poor score will take home the prize.

Announcements

1. The Fifth Fall Meeting of the American Oil Chemists' Society will be held in Chicago, October 29 and 30, at the Congress Hotel, Michigan Blvd., and E. Congress Street.

(Turn to Page 45)

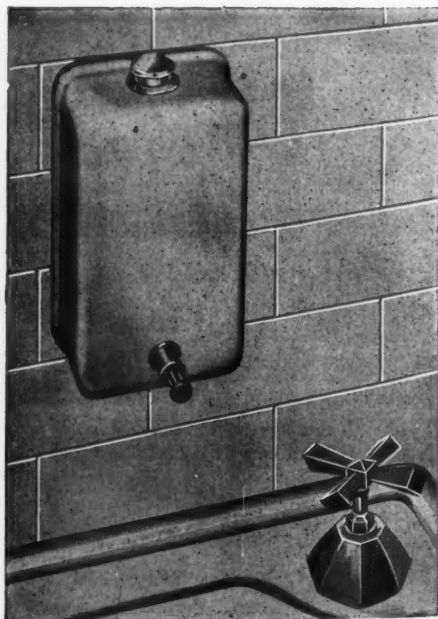
Not an Accident!

The Advantages of a Tank System

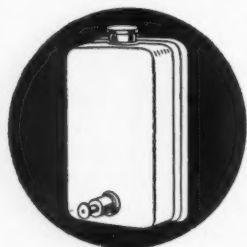
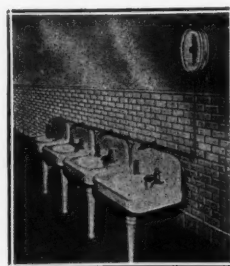
have been incorporated in

SOP-O-ZON No. 12

- INDESTRUCTIBLE
- AMPLE CAPACITY
- CLOSE TO WALL



Sop-O-zon No. 12—Quart Size
Designed especially for
Service Stations



No. 10 Sop-O-zon—Pint Model



BOBRICK MANUFACTURING CORPORATION

Los Angeles, Calif.

ESTABLISHED 1906

New York City



Say you saw it in SOAP!

Oil Traders Help Open New Waldorf

Over seven hundred members of the Oil Trades Association of New York and their guests assisted in the opening of the new Waldorf-Astoria Hotel on the evening of October fifth which was the occasion of the annual banquet of the association. The Oil Trades dinner was one of the first affairs of its kind to be held in the new hotel which had opened its doors only a few days before. Following the usual custom, a reception preceded the dinner which was later served in one of the many hotel ballrooms. Clifford T. Weihman, Smith-Weihman, New York, president of the association, welcomed the guests on behalf of the New York Oil Trades. Among those attending were the presidents of the New Jersey, Philadelphia and Westchester associations as well as other visitors from Cleveland, Chicago and Cincinnati. Following the dinner an elaborate floor show was presented. Bert Squier was in charge of entertainment, his efforts contributing largely to the success of the evening. The banquet was the sixteenth given by the association and was particularly memorable in that it marked the return to the Waldorf-Astoria where the first Oil Trades banquet was held in 1915. This hotel was the scene of the annual affair each year up until the destruction of the old Waldorf-Astoria two years ago.

July Glycerine Imports

Imports of crude glycerine into United States were slightly lower in July, amounting to 822,007 pounds at a price of \$41,561, as compared with 947,321 pounds, worth \$48,870, in June. Refined glycerine imports, on the other hand, were slightly higher in July, totaling 113,651 pounds worth \$8,415, as against 94,696 pounds, worth \$7,864, in the previous month. This year import statistics on crude glycerine have run very close to last year's figures, but imports of refined glycerine have been only about half what they were in the corresponding period of last year. The following figures give in pounds the imports of glycerine into the United States over a period of years:

	Refined	Crude
1923	585,792	14,548,660
1924	1,500,644	14,427,054
1925	2,043,606	19,264,654
1926	10,839,093	27,658,552
1927	8,288,574	14,943,670
1928	4,217,943	4,951,651
1929	5,381,684	14,951,901
1930	3,136,809	12,144,193
Jan.-July, 1931	778,801	6,231,400

Change Alkali Designations

Columbia Alkali Co., New York, has announced a revision in the trade terms which are being used by that company to designate various grades and kinds of alkali. Hereafter, caustic soda will be designated as "caustic soda, 98-100%" based on the NaOH content instead of 76% as previously used to indicate the equivalent of Na₂O. The grades as offered by the company will include solid, water white solid, flake, ground, powdered—all 98-100%, and liquid containing 50% NaOH. The same changes in designation will be made in soda ash. It will be termed "soda ash, 99-100%," indicating the Na₂CO₃ content, instead of the old method of calling it 58% soda ash, the 58% being the Na₂O equivalent. The grades include light, dense and feather ash.

In announcing the changed designations, the company stated: "For many years, the terms '58% soda ash' and '76% caustic soda' have been used in the trade, and confusion has frequently resulted, particularly among those not intimately familiar with these two important chemicals. Soda ash is sodium carbonate, a 99-100% product, and caustic soda is sodium hydroxide, a 98-100% product. Columbia proposes to use these correct designations in the future, believing the clarification of these terms is a step in the right direction."

Report Russian Soap Shortage

Reports from Russia are to the effect that what soap is available on the Russian market is selling as high as \$4.00 a cake. Even this expensive soap, which is generally of poor quality, is almost impossible to buy. The acute shortage may be traced to a lack of animal fats, due to the widespread slaughter of cattle during 1929-1930. Another factor has been the sale on foreign markets of soap which might have been distributed at home. Shipments of soap into England during the past year, where it undersold the English product, attracted considerable attention in the English soap manufacturing industry last year.

Firms selling soaps, shaving creams, dentifrices and other toilet preparations in the Argentine market must, before December 3rd, secure permanent authorization to sell such imported products. All temporary authorizations expire on that date. Details concerning steps to be taken to secure such authorization may be secured by addressing the U. S. Bureau of Foreign and Domestic Commerce.

Michigan Alkali Co. has engaged additional space for its sales offices at 21 East 40th street, and now occupies the entire fortieth floor.

SECURITY PRICES

PRICES of stocks of soap, chemical insecticide, and allied companies as quoted on the New York Stock Exchange, Curb Exchange, other exchanges and over-the-counter are given in the following table. This table of prices is compiled monthly for *Soap* by a representative of one of the oldest and best-known brokerage houses in New York.

	High 1931	Low 1931	Sept. 1 1931	Oct. 1 1931
Allied Chem.	182 $\frac{3}{4}$	77	112	79 $\frac{3}{4}$
Am. Agric. of Del.	29 $\frac{3}{4}$	6	12 $\frac{5}{8}$	6
Amer. Cyan. "B".	12 $\frac{3}{4}$	3 $\frac{5}{8}$	7 $\frac{1}{2}$	4 $\frac{1}{8}$
Armour of Ill. "A"	41 $\frac{1}{2}$	1	17 $\frac{1}{8}$	1
Bon Ami "A"	66 $\frac{1}{4}$	56 $\frac{7}{8}$	63	56 $\frac{7}{8}$
Brillo	8 $\frac{1}{2}$	5 $\frac{1}{8}$	8 $\frac{1}{2}$	6 $\frac{1}{8}$
Colgate, P. P.	50 $\frac{1}{2}$	28	45	30
Corn Prod.	86 $\frac{5}{8}$	40 $\frac{1}{2}$	66 $\frac{1}{4}$	41 $\frac{1}{2}$
Coty	18	3 $\frac{3}{4}$	7 $\frac{1}{8}$	3 $\frac{3}{4}$
Dow Chem.	51 $\frac{1}{2}$	34 $\frac{1}{2}$	42	35
Drug, Inc.	78 $\frac{3}{4}$	48 $\frac{1}{2}$	74 $\frac{1}{2}$	50
Du Pont	107	58 $\frac{1}{4}$	85 $\frac{3}{4}$	60 $\frac{3}{8}$
Glidden	16 $\frac{1}{8}$	4 $\frac{3}{4}$	10 $\frac{3}{8}$	5 $\frac{1}{4}$
Gold Dust	42 $\frac{1}{8}$	18 $\frac{1}{8}$	27 $\frac{3}{8}$	19
Gulf Oil	76	38	63	39 $\frac{1}{2}$
Heyden	13	8	9 $\frac{1}{2}$	8
Int. Agric.	5 $\frac{1}{4}$	1 $\frac{3}{8}$	1 $\frac{5}{8}$	1 $\frac{1}{2}$
Lehn & Fink	34 $\frac{3}{4}$	18 $\frac{1}{2}$	26 $\frac{7}{8}$	21
Mathieson	31 $\frac{1}{2}$	14 $\frac{3}{4}$	23	15
McKess. & Rob...	17	7 $\frac{1}{8}$	10 $\frac{1}{2}$	8
Monsanto	28 $\frac{3}{4}$	16 $\frac{3}{4}$	28 $\frac{3}{4}$	17 $\frac{1}{2}$
Newport "A"	55	41	54	55 $\frac{1}{8}$
Proct. & Gamb...	71 $\frac{1}{4}$	39 $\frac{5}{8}$	63 $\frac{1}{8}$	40 $\frac{1}{8}$
Shell Union	10 $\frac{1}{4}$	3 $\frac{1}{4}$	5 $\frac{3}{4}$	3 $\frac{1}{2}$
Sher. Will.	68 $\frac{1}{2}$	52	61 $\frac{1}{4}$	53
Sinclair	15 $\frac{7}{8}$	6	10 $\frac{3}{4}$	6
S. O. of Cal.	51 $\frac{3}{4}$	29 $\frac{3}{8}$	40 $\frac{1}{2}$	29 $\frac{7}{8}$
S. O. of Ind.	38 $\frac{1}{2}$	17 $\frac{5}{8}$	26 $\frac{1}{2}$	18
S. O. of N. J.	52 $\frac{1}{2}$	28 $\frac{7}{8}$	40 $\frac{3}{8}$	29 $\frac{1}{8}$
S. O. of Ohio	62 $\frac{1}{2}$	35	53	38 $\frac{3}{4}$
Swift & Co.	30 $\frac{3}{8}$	22 $\frac{1}{2}$	26	22 $\frac{3}{4}$
Union Carb.	72	31 $\frac{7}{8}$	51 $\frac{1}{2}$	33
Westvaco	40	8 $\frac{1}{4}$	17 $\frac{1}{4}$	8 $\frac{1}{4}$
Wilson & Co.	4	1	5	1 $\frac{1}{8}$

Exports of toilet or fancy soap from United States in July, 1931, totaled 486,270 pounds, worth \$100,895, as compared with 432,479 pounds, worth \$88,304, in July, 1930.

Laundry soap exports from United States amounted to 1,727,981 pounds, worth \$107,454, in July, 1931, as compared with 2,934,028 pounds, valued at \$202,764, in the same month of 1930.

Soap Tax Likely in England

A revival of the English soap tax is not unlikely in the near future, according to the Editor of the *Soap Trade & Perfumery Review*, London. It may be part of the general increase in taxation in that country. The import embargo on soaps and perfumes into Australia is causing considerable agitation there and has caused quite a shortage of imported soaps, according to a communication to *Soap* from the editor of the *Review*, who states:

"The action of the Australian Legislature, prohibiting the entry, until further notice, of foreign soaps and perfumes into the Australian market, appears to have created less concern abroad than in Australia itself. There are already in the country signs of discontent with the present cost of soaps and this will no doubt intensify as time goes on. There is a demand in Australia, not a very great one, but still substantial, for French fine toilet soaps, with other fine toilet soaps of course, but France has the advantage of fashionable prestige. As the stocks of Roger & Gallet, and the other makers of choice Continental soaps are depleted, scarcity prices can hardly fail to come into operation to further augment the discontent aroused by the Governmental embargo.

The object of this enactment is of course to nurse a native Australian soap and perfumery industry, and so far as appearances may be trusted, a continuance of the embargo may have some success. Several new soap manufactories are being established, mostly on capital provided by this country, and makers of soap plant and machinery here and on the continent are giving this new and promising market their attentive consideration.

So far as the home country is concerned, a national movement has been set in operation to maintain, at whatever sacrifice, the British Sovereign in its integrity. That this will be successful, no one here has the faintest doubt, though swift and searching economies and an increase in the heavy burden of taxation are inevitable. Among the new sources of revenue in contemplation, is certainly a revival of the tax on soap, and this, if adopted, must necessarily be accompanied, in the absence of a general scheme of protection, by an import duty of the same extent."

The second fall meeting of the Drug & Chemical Section of the New York Board of Trade was held at the Drug & Chemical Club, New York, October 15th, with Dr. Max Winkler as the speaker of the evening. His topic was "The Pound Sterling and Foreign Trade in the Drug and Chemical Field." Percy C. Magnus, chairman of the section, presided.

Lanman & Kemp-Barclay Combine

Lanman & Kemp, Inc., New York, and Barclay & Co., soap manufacturers with eight plants in Latin America and the United States, have combined to form the Lanman & Kemp-Barclay & Co. with offices at 135 Water St., New York. E. C. Mears Kemp is president of the new company with John R. Noggle, vice-president and treasurer. Henry Effig, in charge of all soap making for the firm, is vice-president. William H. Hayward is also a vice-president. A. Kendrick, in charge of foreign sales, is secretary of the company. Barclay & Co. have been operating two North American soap plants, one at Paterson, N. J. and the other at Morsemere, N. J. They have Latin American plants in Mexico, Cuba, Colombia, Brazil, Argentina, Chile, and Peru. Lanman & Kemp have been operating two plants, one of which will be closed and consolidated with the Bayonne plant of Barclay. George C. Barclay founded the soap firm bearing his name in 1868 with a plant downtown in New York. Up until 1873, he was a partner in Lanman & Kemp. Barclay & Co. have been well-known factors in the soap markets of South America for the past half century.

—O—

Dr. Edward R. Weidlein, director, Mellon Institute of Industrial Research, Pittsburgh, Pa., has announced that an industrial fellowship for research and moistureproofing and greaseproofing paperboards used in cartons and boxes has been established in that institution by Robert Gair Company, of New York. Recent progress in package merchandising has indicated, he pointed out, a growing need for paperboard containers with improved moistureproofing and greaseproofing qualities.

—O—

The leading soap manufacturer in Siam has recently completed modernizing its plant. It is now equipped for the manufacture of a full range of soaps. The raw material needs of the plant for fats can be supplied locally, except for palm oil, which is imported from the adjoining Federated Malay States. The products of this company have met with a ready acceptance on the part of all elements of the population except foreigners, who still buy imported soap from preference. The local firm's toilet soap sells at retail for about 50 per cent less than the foreign article.

—O—

Soviet exports of soda ash, caustic soda and sodium bicarbonate increased from 7,498 metric tons in 1929 to 31,487 tons in 1930. The leading buyer was Germany, purchases totaling 7,198 tons.

Koppers Markets New Sulfur Soap

Koppers Research Corp., Pittsburgh, a subsidiary of the Koppers Company, is marketing a new soap product under the name of Koppers Thylox Sulphur Soap. The product is a high grade toilet soap containing twenty per cent colloidal sulfur of which the Koppers Company is a large producer. The new soap is being marketed through



the drug trade and is designed primarily as a medicinal soap for use in cases of certain dermatological disorders. The product was developed after research work over the past two years which included experimentation on various types of human skins among the different races, sexes, and ages. The sulfur is obtained from the Thylox Process for the liquid purification of regular city gas, which was developed in 1925. The sulfur is secured in a very finely divided state, the average particle of flowers of sulfur being some 20,000 times larger. The soap is packed three cakes to the box, wrapped in black, aluminum, and sulfur-colored paper, and sells for \$1.00 per box retail. Special attention in its sale will be given to use for regular beauty culture, infant care, and skin disorders.

—O—

National Wholesale Druggists' Association met at the Hotel Ambassador, Atlantic City, N. J., during the week beginning October 12. The convention of the National Beauty and Barbers' Supply Dealers Association was held at the New Jefferson Hotel, St. Louis, the same week.

—O—

Prof. Curt P. Wimmer, College of Pharmacy, Columbia University, New York, is conducting two evening courses at Columbia this winter one of which deals with perfume materials and the other with the preparation of cosmetics and toilet articles.

When it comes
to supplying the soapmaker
with perfume materials, we are in position to furnish
the highest quality merchandise at interesting prices.

When Again in the Market for

Oil Rosemary Spanish
Oil Thyme Red and White
Oil Lavender Flowers French
Oil Vetivert Bourbon and Java
Oil Geranium Bourbon and African

Write Us for Prices.



All Products of

Bertrand Freres, S. A.

GRASSE

FRANCE

Sole Representative U. S. and Canada

P. R. DREYER INC.

26 CLIFF STREET

NEW YORK

Agent for

PAOLO VILARDI
Reggio Calabria, Italy
Essential Oils

H. RAAB & CO.
Roermond, Holland
Artificial Musk

VANILLIN FABRIK
Hamburg, Germany
Aromatic Chemicals

Say you saw it in SOAP!

PERSONAL AND IMPERSONAL

W. B. Watkins, director of sales of J. R. Watkins Co., Winona, Minn., accompanied by Mrs. Watkins, is at present on an automobile tour of the European continent from which they will return about the end of November. They will travel through Holland, Germany, Belgium, France and Switzerland, making stops to enable Mr. Watkins to study at first hand sources of raw materials in which his company is interested.

Col. William Cooper Procter has been designated by President Herbert Hoover as one of the committee of prominent executives to assist Mr. Gifford of American Telephone & Telegraph Co. in carrying out the president's unemployment relief plan. Mr. Procter's success in keeping the employees of Procter & Gamble Co. in steady employment is one of the outstanding examples of intelligent production planning in American industry.

The Manchester, Conn., plant of Bon Ami Co. has been re-opened after two weeks of overhauling, and is preparing for a busy season. It is the policy of the company to close down the plant completely during the vacation period at which time all needed repairs are made.

Van Iderstine Co., Long Island City, N. Y., renderers, were recently reported to be contemplating entering the manufacture of laundry chip soap owing to the market position of tallow and greases. This report, however, was branded untrue by the company to a representative of *Soap*.

James V. Reed, vice-president and sales manager of J. B. Williams Co., Glastonbury, Conn., and identified with that company over a period of the past forty years, died at his Yonkers, N. Y., home, September 19th, at the age of 68.

Solutionizer Company of Chicago announces the appointment of Turco Products, Inc., 1512 Industrial Street, Los Angeles, California, as exclusive distributors of the new "Plug Type Solutionizer" in all territory west of the Rocky Mountains.

Nathan T. Pulsifer, founder of the Orford Soap Co., Manchester, Conn., died September 9th at his

home in Houghton Farms, Orange County, N. J. He was 79 years old at the time of his death and maintained a directorship of Bon Ami Co., the successor of Orford Soap Co.

Adrian D. Joyce, head of Glidden Co., Cleveland, states that sales of the company showed a steady increase during the third quarter of the year.

Wyp-a-Way Soap Co., Cleveland, recently conducted a house-to-house sales campaign on Wyp-a-Way soap in the Cleveland market.

Stockholders of the Procter & Gamble Company at their annual meeting October 14 voted on an amendment to the company's charter so as to abolish the series of June 1, 1930, preferred stock, and to change the shares of that series into shares of the series of February 1, 1929, on a share for share basis. Both series are part of an authorized issue of 457,500 preferred shares and have the same rights as to dividends, redemption and liquidation provisions.

Columbia Alkali Co., New York, has opened branch sales offices at 431-451 St. Clair street, Chicago, and in the Santa Fe Terminal building, Dallas. These are in addition to the branch office now maintained in Carew Towers, Cincinnati.

American Cyanamid Co. has issued a booklet which lists all the industrial chemicals manufactured by the parent company and its various subsidiaries which include Calco Chemical Co., Kalbfleisch Corp., A. Klipstein & Co. and John C. Wiarda & Co.

J. W. Newman has been appointed sales-manager of Dorothy Gray, Inc., makers of toilet preparations. He has been with the company for the past six years.

C. H. Bourguet, Lautier Fils, Inc., New York, has just returned from a visit to France where he attended the lavender distillation at the Lautier Fils headquarters. He reports that this year, due to the drought, the yield of the plants by weight will be only about half of last year's yield.

Colgate-Palmolive-Peet Co. will pay its regular 62½c. quarterly dividend October 21st on common stock of record October 6th. The regular quarterly dividend of \$1.50 a share on preferred stock was paid October 1st on stock of record September 14th, and another regular dividend has been declared payable January 1st on stock of record December 10th.

Dr. Karl T. Steik, recently of the Standard Oil Development Company, has been appointed research director at the new laboratories of the National Oil Products Company at Harrison, New Jersey. Dr. Steik has long been associated with the oil industry and his talents are well known. He holds a master's degree from Harvard University and a Ph.D. degree from the University of Chicago. He joined the Sun Oil Company as research chemist and later the Standard Oil of Indiana. Subsequently he became affiliated with the Standard Oil Development Company at Elizabethtown, New Jersey.

The Locus Point, Baltimore, warehouse of Procter & Gamble Co. was damaged by fire September 19th as the result of a blaze which followed spontaneous combustion in a cargo of copra stored there.

Chicago Liquid Soap Makers Meet

A meeting of manufacturers of liquid toilet soaps was held on Oct. 7 at the Midland Club, Chicago. A number of the leading liquid soap makers of the Chicago district attended for a discussion of various evils of the present business. At the meeting, E. Earl McDow, treasurer of the Antiseptol Liquid Soap Co. was chosen temporary chairman, and Harold L. Aronson of the U. S. Sanitary Specialties Corp., temporary secretary.

A second luncheon meeting will be held at the same place on Oct. 20, at which time it is planned to form a permanent organization.

P & G Cuts Wages 10-15%

Procter & Gamble Co. announced on Oct. 8 a reduction of between 10 and 15 per cent in wages and salaries of employes and executives. Confirmation of the cut was received in a communication from the company by *Soap*. In announcing the reduction, Colonel William Cooper Procter, Chairman of the Board of P. & G., stated that the cut was made in order to bring costs of production and distribution in line with prevailing economic conditions. In preparing the reduction schedule, the company made sure that wages were kept above the levels of 1928 and 1929 in purchasing power of the dollar, he said.

Japan Soap Maker Visits U. S.

Toshiro Takei, managing director of The Lion Soap Co., Ltd., of Mukojima, Tokyo, Japan, and Chairman of the Board of the National Soap Manufacturers Association of Japan, has been in the United States since October first in the interests of the Japanese soap industry. His arrival in the United States followed a four months tour of the soap industry of Europe, chiefly in studying manufacturing technique and marketing methods. Mr. Takei is studying conditions in this country, including visiting several American plants. To a representative of *Soap*, he stated that the manufacture and use of soap is expanding rapidly in Japan, today reaching some five or six pounds per capita, although the industry in its modern form is only about sixteen years old in that country. Mr. Takei is spending the month of October in various parts of the United States and will sail for Japan from the Pacific Coast about Nov. 1.



After fifty years of alkali production—the plant of the Solvay Process Company at Syracuse, N. Y., viewed from the air. Present day plant of the pioneers in alkali production in the United States and first users of the Solvay process. American alkali production began in 1881

CHICAGO NEWS

THE Chicago Perfumery, Soap and Extract Association held its first meeting of the fall season at the Midland Club at 12:30 on Wednesday, September 16th. Meetings will continue throughout the year at the same place on the first and third Wednesdays of each month. At the opening session a number of important plans were discussed. Chief among these was the projected annual fall banquet for 1931. As this is the most important social event among the trade during the entire year, the Association determined to begin arrangements immediately in order to insure its success. Arnold G. Schneider, of Victor Chemical Works, was appointed head of the committee—a thoroughly capable chairman who has handled some of the Associations most successful banquets in past years. Mr. Schneider has announced that the Knickerbocker Hotel Ball Room will be the scene of the affair, which will offer a number of unusual features, though, following a well established tradition, the souvenir bag for the ladies will probably hold the greatest enticement for the guests. The manufacturers who so graciously contributed their products last year, together with a number of others, have been notified of the banquet, and it is expected that most of them will take advantage of this unique opportunity of both advertising their merchandise and endorsing the Association's collective promotional efforts on behalf of the cosmetic and allied industries. It is expected that about 350 guests will attend this year. The date has been set a little earlier this time, being Wednesday, December 2nd. Thus it will fall well before the western representatives make their year's end exodus for eastern conferences.

Ray Morris, Orbis Products Trading Co., announced at the meeting that Bowling would be resumed on Wednesday, September 30th. The crowd that assembled on this date was encouraging and a tournament is planned for some time in November. Regular sessions will be held every Wednesday night throughout the winter at the Elk's Club, at 7:30 P. M.

The Chicago Drug and Chemical Association began its fall series of monthly meetings with a luncheon at the Hamilton Club on Thursday, September 24th. President O. H. Raschke, Victor Chemical Works, greeted the members and outlined plans for the coming season, after which the members present, numbering close to a hundred, were entertained, through the courtesy of the Peoples Gas Light and Coke Co., with a series of motion pictures illustrating the story of

the piping of natural gas from Texas to Chicago. The Association will adhere to its custom, this year, of holding luncheon meetings on the last Thursday of each month. The date and place of the annual banquet will be announced at an early date by Secretary Joseph P. Sullivan. It is anticipated that many applications for new memberships will be received within the next few months.

The final golf tournament of the year, under the auspices of the joint auxiliary of the two associations was held with great success at Itasca Country Club on Tuesday, September 22nd. A crowd of twenty-eight assembled for the final match play and the season's friendly little rivalries were given final settlement. The honor of carrying away the Class A championship went to A. J. Dedrick, of Edward T. Beiser Co., with 80—8; net 72. Mr. Dedrick easily outdistanced his competition and was not seriously pressed. Class B winner was Harold E. Lancaster, of Marshall Field & Co., a logical leader on the strength of his strong competition all year. Mr. Lancaster's score was 98—24; net 74. The Class C champion was Joseph Gauer, of Fritzsche Brothers, Inc., with 102—26, net 76. With this behind him, Mr. Gauer will probably become a contender in Class B and possibly in Class A next year. The remarkable success of the season of tournaments as a whole may be attributed almost entirely to the efforts of Chairman A. C. Drury, of A. C. Drury & Co., Inc., who has been tireless in his endeavors, in past years as well as this one, to make this feature of association activities a telling one. The handicap system of three classes, which he introduced, has done much to increase the popularity of the tournaments, for it has insured a wider distribution of prizes and a sharper sense of competition. The Auxiliary is now on a sound basis, is strongly favored, and will operate recurrently each year, cementing relationships among members who met formerly during the summer only at a picnic, once each year.

Members of both Chicago associations were deeply grieved to hear of the death, on Friday night, September 18th, of the mother of John Buslee, of Neumann-Buslee & Wolfe, Inc. The funeral was held on Monday, September 21, at the Chapel at 3337 West North Ave.

Imports of castile soap into United States during July, 1931, amounted to 240,191 pounds, worth \$22,155, as against 298,571 pounds, valued at \$26,664, in the same month of last year. Imports of toilet soap were 81,575 pounds, worth \$27,389, in July, 1931, as against 123,117 pounds, valued at \$35,708, in July, 1930.

Publishers' Announcement



EFFECTIVE with November, 1931, issues of *Oil & Fat Industries* will be combined with SOAP as a special bound in section. The same technical and scientific material which has been a feature of *Oil & Fat Industries* for a number of years past, will continue to be published as heretofore. There will be no change in personnel, management, or policy of *Oil & Fat Industries*—merely a physical combination.

The fields as now covered by the separate magazines are so closely allied in many respects that the

combination of the publications under a single binding is altogether logical. Soaps, glycerine, oils and fats, and allied products will be the broader field of the new and larger magazine.

The circulation of *Oil & Fat Industries* will be combined with that of SOAP. A large percentage of the present advertisers in both publications will benefit considerably from this materially increased circulation. There will be no increase in advertising rates. Where there are duplicate subscriptions for the two publications, they will be extended pro rata.

MacNair-Dorland Company
Publishers

SOAP CHEMISTS' SECTION

(Official Publication, SOAP SECTION, American Oil Chemists' Society)

Soap and Oil Chemists Meet

(From Page 35)

2. Members and Guests are cordially invited to attend.

3. The Congress Hotel will be the headquarters and we urge all who attend to make reservations on the reservation card enclosed with the program.

4. Special trips to plants of interest have been arranged by the Local Committee. When registering please indicate what trips you desire to take.

5. There will be informal luncheons in the Pine Room of the Congress Hotel on both Thursday and Friday for members and guests. Make your reservations for these luncheons at the registration desk.

AMUSEMENTS

A special Ladies Committee has been appointed and has made suitable arrangements to see that the ladies attending the convention are properly entertained.

Friday night space has been reserved at the Planetarium for an American Oil Chemists' Society group. We urge all of you to take advantage of this opportunity to see an interesting and unusual sight.

The Annual Bowling Tournament, under the management of J. P. Harris, will again be a feature of the convention. This Bowling Tournament is to take place Thursday night, October 29, at the Bensinger Alleys, 31 E. Congress Street. There will be an opportunity for five-men teams and singles. Give Mr. Harris your entry promptly.

Tickets for the Chicago-Purdue and Northwestern-Illinois games may be secured by application to the Local Committee. Do not wait until the time of the Convention before making reservations.

If the weather is suitable, arrangements will be made for those who care to play golf.

REGISTRATION

Registration will take place between 9:30 and 10:00 A.M., Thursday morning, October 29. There will be a nominal registration fee (\$1.00) to take care of incidental expenses of the convention.

EXHIBITS

Provision has been made for exhibits of

chemical apparatus, supplies, and machinery.

Program

Thursday, October 29, 1931

Registration 9:30 to 10:00 A.M.

Meeting called to order at 10:00 A.M. by President A. S. Richardson.

Address of welcome by Mayor A. J. Cermak.

Meeting turned over to Archibald Campbell, Chairman of the Soap Section.

COMMITTEE REPORTS

1. Report of the Detergents Committee—J. G. Vail, Philadelphia Quartz Co., Philadelphia, Pa.

2. Report of the Glycerin Analysis Committee—J. T. R. Andrews, Procter & Gamble Company, Ivorydale, Ohio.

3. Report of the Soap Analysis Committee—M. L. Sheely, Armour Soap Works.

PAPERS

1. "Soap Phases," R. H. Ferguson, Procter & Gamble Co., Ivorydale, Ohio.

2. "Light Colored Saponified Fatty Acids," R. B. Trusler, Davies-Young Soap Company, Dayton, Ohio.

3. "Notes on Power Laundry Practice," C. E. Lennox, Swift & Company, Chicago, Ill.

4. "Studies in the Comparison of Detergents," W. H. Burkhart, Gold Dust Corporation.

5. "The Determination of Water in Soaps," A. K. Church, Lever Brothers Company.

6. "Activated Carbons, their Production and Uses," J. Wrench, Industrial Chemical Sales, New York City.

7. "A New Method of Rendering," O. H. Wurster, Wurster-Sanger Company, Chicago, Ill.

SPECIAL ANNOUNCEMENTS

Adjournment

Informal Luncheon — Pine Room, Congress Hotel.

The afternoon will be devoted to trips to various industrial plants.

Bowling Tournament—8:00 P.M.—Bensinger Alleys.

Program

Friday, October 30, 1931

Meeting called to order at 10:00 A.M. by President A. S. Richardson.

PAPERS

1. "Changes in Edible Oils and Fats due to
(Turn to Page 65)

JUSTIN DUPONT

ARGENTEUIL, FRANCE

We offer

PHIXIA

(Hydroxycitronellal)

This product, so useful in the art of perfuming, is one of the specialties of Justin Dupont. On account of its great instability under the influence of reagents, Hydroxycitronellal is difficult to obtain in the perfect state of purity demanded for high-class perfumery. We have been engaged in this particular manufacture for the last twenty years, and our specialty "PHIXIA" is, undoubtedly, one of the best.

IONANTHEMES

IONANTHEME BRUTE is a crude body, obtained through the action of acid agents on Pseudo Ionone. It has a brown color, and a still rough odor, but is very interesting for soap and certain very cheap compounds. This product is the raw material from which the other Ionantheses are derived, namely:—

Ionantheme
Ionantheme 100%
Ionantheme Alpha
Ionantheme Alpha Extra Blanche

Exclusive representative in the United States and Canada

GEORGE SILVER IMPORT CO.

461-463 FOURTH AVE.

NEW YORK CITY

Say you saw it in SOAP!

ON PRODUCTS AND PROCESSES

It is claimed that a fair amount of saponifiable fatty acids can be recovered from the scums which are formed during the running off of spent lyes from the soap kettle. In tests on the conversion of these scums into hard soap, the scum was first pressed, then dissolved in water to a soapy paste, which was salted out with salt or alkali and allowed to stand for two or three hours. The soap, obtained in 97-8% yield, was soluble and lathered well. *Maslob. Zhiron. Delo.*

Some of the defects of oxygen-liberating washing powders are said to be as follows: soda-containing powders do not prevent loss of soap by their supposed softening of the water; there is a loss of active oxygen by its action upon organic impurities which would be removed by soap alone; there is also a loss of oxygen by rapid boiling of the wash goods. The cleansing effect of oxygen bubbles is doubtful; active oxygen attacks the fiber and the wash usually requires an after-treatment to remove spots. *Seifensieder-Ztg.*, 58,371-2 (1931).

The distribution of glycerol in curd soap and lye in soap boiling is said to satisfy the Freundlich adsorption isotherm. The number of salting-out changes necessary for satisfactory glycerine recovery can be calculated from equations based upon this fact. *J. Soc. Chem. Ind. Japan*, Suppl. Bind. 34,186-8 (1931).

To achieve the partial or complete substitution of the water in a hydrous soap by sodium bicarbonate, split or distilled fatty acids, with or without the addition of a fat solvent, are intimately mixed with powdered calcined soda until a homogeneous mass is obtained. Before or after saponification is completed, liquid or solid grain soap or soap paste is added in suitable proportions and the product milled. Ease of milling and reduction in the amount of fatty acid are claimed. *Br. Pat. No. 254,755.*

A patented detergent, said to be suitable for laundry uses, comprises a soap substantially free from alkali, containing about 4% of a free naphthenic acid and about 0.25% of kerosene. *U. S. Pat. No. 1,812,507.*

Comparative determination of free fatty acids in fats showed that as accurate results are ob-

tained by use of a solution of alkali in alcohol as by the use of a mixture of alcohol-ether or alcohol-benzene, provided the titration is carried out at high temperature when ether or benzene is not used. Moreover, the use of ether has the disadvantages that the dissolved neutral fat is very easily saponified (this makes the endpoint more difficult to detect) and that commercial ether frequently contains, esters which are saponified at low temperature and are, therefore, counted as acidity of the fat (this necessitates preliminary distillation of the ether over sodium). No difference was noted when aqueous or alcoholic potassium hydroxide solution was used. *Chimie et Industrie*, Special No. 637 (March, 1931).

In making "non-freezing" lubricants, oils or fats are mixed with a glycol or with a hydroxyl containing ether of a glycol and a dispersing agent such as soap; a high-molecular-weight sulfonate or an alkylolamine; for example, a mixture of spindle oil and tallow colophony or paracin oxidation products is mixed with ethylene glycol, borax, benzyl alcohol and an aqueous potash solution to form homogeneous product suitable for lubricating locomotive axles, electric contacts, rail switches, etc., or for use in hydraulic presses or brakes or as a rust preventing coating. *Brit. Pat. No. 240,294.*

It is said that the difference in iodine number of the unsaponifiable matter in olive oil and that in the oils commonly used as its adulterants can be used in determining adulteration in amount of 5% or less. The iodine number of the unsaponifiable is 197-206 in olive oil and 117-124 in the adulterating oils. *Olii minerali, olii e grassi, colori e vernici*, 11, 9-10 (1931). *Chem. Abstr.* 244,140 (1931).

In a patented soap flake, soap containing somewhat less than 15% of water is incorporated with a "per-alkaline" salt, such as sodium perborate and the mixture is formed into thin flakes. *U. S. Pat. No. 1,810,759.*

A hydroxy-polibasic aliphatic acid compound such as a tartrate may be added to compositions such as those containing castor oil and nitrocellulose in order to retard rancidification. *U. S. Pat. No. 1,805,458.*

CONTRACTS AWARDED

Armour & Co. has been awarded the contract to supply thirty-six barrels of powdered a soap to the Brooklyn army medical department, the Armour quotation being 5.18c.

U. S. Sanitary Specialties Co. was low bidder on 400 kegs green soap in a recent U. S. Veterans' Bureau, Washington, bidding, with a quotation of \$580. Other bids and bidders were as follows: James Good, Inc., \$711.20; Crystal Soap Co., \$632; National Hospital Supply Co., \$860; Puritan Soap Co., \$1,000; Armour & Co., \$672; Holbrook Mfg. Co., \$700; Kranich Soap Co., \$840; Clifton Chemical Co., \$976, and Goulard & Olena, Inc., \$1,080.

Crystal Soap & Chemical Co., Philadelphia, has been awarded the contract to supply the Army engineer corps with 2,000 lbs. fish oil soap at \$7.90 per cwt. Unity Sanitary Supply Co., New York, awarded 1,000 cakes scouring soap at \$4.50 cwt. Penn Chemical Works, Philadelphia, awarded 2,000 lbs. sal soda at \$1. Colgate-Palmolive-Peet Co., Chicago, awarded 1,000 cakes lava soap at \$1.86 per hundred cakes. George E. Marsh, Lynn, Mass., awarded 10,000 cakes laundry soap at \$2.82.

James Good, Inc., Philadelphia, has been awarded contract for 14,000 pounds of soft soap for Wright Field air corps. Quotations were: 5.79c f.o.b. San Antonio; 4.79c f.o.b. Middletown, and 5.09c f.o.b. Osborn.

H. H. Rosenthal Co., New York, was low bidder for 10,000 lbs. caustic soda for Panama Canal supplies in a recent bidding in Washington. The bid was \$300. George Chemical Co., New York, was low on 50,000 lbs. soda ash with \$985, Chrystal Soap & Chemical Co., Philadelphia, bidding \$990. International Combustion Tar & Chemical Corp., New York, was low bidder on 5,000 gals. creosote oil with a quotation of \$950.

B. Kuposky, Boston, was recently awarded the contract for a quantity of Rinso at a price of 18.75c in a Boston quartermaster's bidding. Also awarded quantity of 10-oz. cakes Ivory soap at 10.5c and quantity of Lux toilet soap at 6.25c. George Melhado & Co., Boston, awarded Ingram's shaving soap at 29.75c., and Pebeco toothpaste at

29.5c. Colgate - Palmolive - Peet Co., Chicago, awarded Palmolive soap at 6.1c. BeVier & Co., New York, awarded Pepsodent toothpaste at 31c and Williams toothpaste at 14c. Kolynos Co., New Haven, awarded Kolynos toothpaste at 17c. District Wholesale Corp., Washington, awarded quantity of Listerine toothpaste at 13.5c.

Armour & Co., Chicago, was awarded the following contracts in a recent Chicago quartermaster's bidding: 2,580 lbs. laundry soap, 3.13c; 6,000 lbs., 3.14c; 13,020 lbs., 3.08c; 4,800 lbs., 3.12c; 4,500 lbs., 3.16c; 3,600 lbs., 3.12c; 910 lbs., 3.06c; 12,000 lbs., 2.9c; 3,120 lbs., 3.14c; 2,000 cakes toilet soap, 2.13c and 2.02c; 1,100 cakes, 2.148c; 1,200 cakes, 2.089c. Procter & Gamble Distributing Co., Chicago, awarded 16,920 lbs. laundry soap at 3.19c. Francis H. Leggett & Co., New York, awarded 900 cakes grit soap at 3.23c, 500 cakes at 3.163c, 100 cakes at 3.41c, 300 at 3.58c, 120 at 3.52c and 428 at 3.92c. Hunnewell Soap Co., Cincinnati, awarded 2,300 cakes grit soap at 3.25c. U. S. Soap Co., Cincinnati, awarded 300 cakes grit soap at 5c. Swift & Co., Chicago, awarded 560 cans scouring powder at 2.38c.

C. O. Bartlett and Snow Company, Cleveland, Ohio, have recently issued their new Bulletin No. 69, descriptive of their complete line of dryers of all types. Among the various styles of equipment illustrated in this bulletin are to be found direct heat dryers, indirect, and indirect-direct dryers. Each type may be adapted to batch or continuous operation. Particular attention is directed to the Bartlett and Snow Style A steam heat dryer, which is used for drying tankage and similar residual products. This type of equipment is also suitable for drying chemicals and earthy materials of various kinds.

In forming products suitable for compounding with rubber latex, a water-soluble volatile base soap of a higher aliphatic acid, such as ammonium stearate, is first mixed with a filler such as carbon black, in a finely divided form, which is nonreactive with the acid, the mixture is mixed with a rubber latex, and the soap is then reconverted into the original fatty acid suitably by removing ammonia in a drying operation. U. S. Pat. No. 1, 798,253.

Announcement—

Advance in subscription price in Canada » » » »

THE subscription price for SOAP has been increased to \$5.00 per year per copy in the Dominion of Canada effective October 15, 1931. This step has been made necessary by the import duty now imposed on various types of publications shipped into the Dominion, and specifically by the ruling recently made in the case of SOAP by the Commissioner of Customs at Ottawa that the publication is dutiable.

The new Canadian subscription price applies in the case of both new and renewal subscriptions. Subscriptions entered and paid prior to October 15 at the old rate of \$3.00 per year will be continued to their expiration without change or additional cost. Upon renewal, they will carry the new price of \$5.00. Subscriptions in the United States, Latin America, and other countries will continue to carry a \$3.00 yearly rate without change.

We regret the necessity of an advance in the Canadian subscription price of SOAP at this time, but it is necessary in view of the cost of the duty, attaching revenue stamps, rehandling of copies, etc., incidental to the new tariff regulations.

The Publishers.

MAC NAIR - DORLAND COMPANY
136 LIBERTY STREET NEW YORK, N. Y.

Say you saw it in SOAP!

RECORD OF TRADE-MARKS

The following trade-marks were published in the September issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

Trade Marks Filed

Dixico—This in outline letters describing washing powder. Filed by Dixie Chemical Products Co., Birmingham, Ala., Nov. 28, 1928. Claims use since 1925.

Stearnize—This in solid letters describing germicidal soap. Filed by Frederick Stearns & Co., Detroit, June 19, 1931. Claims use since June 10, 1931.

Lov-Kis—This in solid letters describing soap. Filed by Welters Mfg. Co., Jacksonville, Fla., July 21, 1931. Claims use since Oct. 1, 1929.

Barflox—This in solid letters describing insecticide. Filed by Central Chemical Co., Hagerstown, Md., July 2, 1931. Claims use since June 2, 1931.

A A A—This in solid letters describing insecticide, deodorant and rodent exterminator. Filed by Acme Disinfectant Co., Washington, July 9, 1931. Claims use since July 1, 1928.

S and B—This in solid letters describing antiseptic. Filed by S & B Chemical Co., Asheville, N. C., July 15, 1931. Claims use since Nov. 2, 1930.

Cresophan—This in solid letters describing antiseptic and disinfectant. Filed by Harold H. Fries, New York, July 18, 1931. Claims use since Apr. 27, 1931.

Colgate's—This in solid letters on carton, together with picture of man lathering face, describing shaving soap and sticks. Filed by Colgate-Palmolive-Peet Co., Chicago, July 10, 1931. Claims use since Jan. 1, 1911.

Portrait of W. A. Allen, together with his name, describing tooth paste. Filed by Montana Mineral Products Co., Billings, Mont., June 16, 1931. Claims use since Oct. 1, 1930.

MacNes—This in script describing insecticide. Filed by Furst-McNess Co., Freeport, Ill., July 6, 1931. Claims use since May 1, 1931.

V—B—This in solid letters describing washing

powder. Filed by C. E. Vanderpoel, Jacksonville, Jan. 30, 1931. Claims use since June 1, 1929.

Madrina—This in solid letters together with shield, describing castile soap. Filed by Madrina Corp., New York, May 5, 1931. Claims use since May 15, 1929.

Floridol—This in solid letters describing shampoo. Filed by Coco-Pine Co., St. Petersburg, May 22, 1931. Claims use since March, 1930.

Orkin—This on diamond shaped reverse plate describing insecticides. Filed by Orkin Exterminating Co., Atlanta, July 1, 1931. Claims use since Jan. 4, 1926.

Efort—This on reverse plate describing disinfectant and germicide. Filed by S. A. Mole, Buffalo, July 3, 1931. Claims use since June 29, 1931.

Sanitine—This in solid letters describing disinfectant, deodorant and cleaner. Filed by Sanitine Products Co., New London, Conn., July 8, 1931. Claims use since June 1, 1931.

Peroxodent—This in script describing dental creams. Filed by Samson Rosenblatt, New York, July 11, 1931. Claims use since July 1, 1931.

Shampol—This in solid letters describing shampoo. Filed by Jewel Oil Co., Jersey City, N. J., July 15, 1931. Claims use since June, 1929.

Purident—This in solid letters describing dentifrice. Filed by Peak Corp., Houston, Texas, July 17, 1931. Claims use since Feb. 16, 1931.

Flit—This in solid letters describing insect repellent. Filed by Stanco, Inc., Wilmington, July 20, 1931. Claims use since July 6, 1931.

Nourishine—This in solid letters describing liquid shampoo. Filed by Nourishine Mfg. Co., Los Angeles, July 22, 1931. Claims use since Sept. 1, 1925.

Rose-Aid—This in solid letters describing insecticides and fungicides. Filed by Sherwin-Williams Co., Cleveland, July 23, 1931. Claims use since July 11, 1931.

Q P—This in solid letters describing metal polishes. Filed by Quality Products Laboratories, Inc., Richmond, Va., June 12, 1931. Claims use since June 2, 1930.

Palmolive—This on reverse plate describing toilet soap. Filed by Colgate-Palmolive-Peet Co., Chicago, June 26, 1931. Claims use since 1899.

F-B—This in solid letters describing soap. Filed by Fitzpatrick Bros., Inc., Chicago, July 16, 1931. Claims use since Apr. 15, 1931.

Ridzit—This in solid letters describing paste

soap. Filed by Ben Schofield Mfg. Co., New Orleans, July 20, 1931. Claims use since June 26, 1931.

Spark Glo—This in outline letters against background of sparks, describing metal polish. Filed by Norn Chemical Co., Baltimore, July 25, 1931.

Bonide—This in solid letters together with words, "Green Tox 50," each letter of which appears on a separate leaf, describing insecticide. Filed by Bonide Chemical Co., Utica, N. Y., July 22, 1931. Claims use since July 1, 1931.

Silk Floss—This in solid letters describing shampoo. Filed by Huntington Laboratories, Inc., Huntington, Ind., July 23, 1931. Claims use since May 10, 1921.

Purina—This in solid letters describing dog soap. Filed by Ralston Purina Co., St. Louis, Aug. 19, 1931. Claims use since May 1, 1931.

Moth-No-Mor—This in solid letters describing insecticide. Filed by Moth-No-Mor Corp., Chicago, Mar. 28, 1931. Claims use since July 7, 1926.

Exit—This in outline letters describing liquid insecticide. Filed by Midway Chemical Co., Chicago, Apr. 20, 1931. Claims use since Jan. 7, 1930.

SuperDent—This in solid letters describing tooth paste. Filed by Superdent Dentist's & Chemist's Corp., New York, May 27, 1931. Claims use since May 6, 1931.

Marschalls—This in solid letters, together with letters "D S D" in outline type, describing disinfectant. Filed by Marschall Dairy Laboratory, Madison, Wis., July 14, 1931. Claims use since June 3, 1931.

Flit—This in block letters on carton describing insect repellant cream. Filed by Stanco, Inc., Wilmington, July 20, 1931. Claims use since July 6, 1931.

Black Flag—This in solid letters accompanied by flag bearing same words, describing insecticides. Filed by Black Flag Co., Baltimore, July 24, 1931. Claims use since January, 1926.

Aromist—This in solid letters against hexagonal background, describing antiseptic. Filed by T. J. Holmes Co., Chartley, Mass., Aug. 7, 1931. Claims use since July 10, 1931.

S/H—This in solid letters describing disinfectant. Filed by Pratt Food Co., Philadelphia, Aug. 13, 1931. Claims use since June 20, 1931.

—o—

Trade Marks Granted

286,583. Polish. Consolidated Products Corp., Plainfield, N. J. Filed May 1, 1931. Serial No. 314,041. Published June 16, 1931. Class 16.

286,599. Shampoo. Healoil Laboratories, De-

troit. Filed April 21, 1931. Serial No. 313,599. Published June 16, 1931. Class 6.

286,602. Animal Insecticide. Pitman-Moore Co., Indianapolis. Filed April 29, 1931. Serial No. 313,973. Published June 16, 1931. Class 6.

286,642. Polishing Waxes. Minnesota Mining & Manufacturing Co., Wilmington. Filed September 25, 1929. Serial No. 290,220. Published June 16, 1931. Class 16.

286,701. Antiseptic Paste. Absosure Products, Inc., Royal Oak, Mich. Filed April 23, 1931. Serial No. 313,700. Published June 9, 1931. Class 6.

286,750. Liquid Soap Dispensers. Bobrick Manufacturing Corp., Los Angeles. Filed November 25, 1930. Serial No. 308,286. Published June 23, 1931. Class 13.

286,762. Automobile Polish. Midway Chemical Co., Chicago. Filed September 8, 1930. Serial No. 305,464. Published June 23, 1931. Class 16.

286,812. Dentifrices. Research Foundation, Inc., New York. Filed January 16, 1931. Serial No. 310,027. Published May 5, 1931. Class 6.

286,815. Cleaner and Polish. J. A. Sexauer Mfg. Co., New York. Filed January 23, 1931. Serial No. 310,307. Published June 23, 1931. Class 4.

286,828. Toilet Soap. Omega Chemical Co., New York. Filed April 24, 1931. Serial No. 313,752. Published June 23, 1931. Class 4.

286,829. Soap Powders. Rex Products & Manufacturing Co., Detroit. Filed April 25, 1931. Serial No. 313,798. Published June 23, 1931. Class 4.

286,888. Soap in Granular Form. Hewitt Bros. Soap Co., Dayton, Ohio. Filed December 10, 1930. Serial No. 308,828. Published June 23, 1931. Class 4.

286,950. Soap. De Gama Chemical Co., San Francisco. Filed May 4, 1931. Serial No. 314,157. Published June 23, 1931. Class 4.

287,083. Soaps and Cleaning Compounds. Green Oil Soap Co., Chicago. Filed April 28, 1931. Serial No. 313,913. Published June 30, 1931. Class 4.

287,087. Cleaning Compound. American Chemical Works, Inc., Covington, Ky. Filed May 7, 1931. Serial No. 314,264. Published July 7, 1931. Class 4.

287,091. Soap. Colgate-Palmolive-Peet Co., Chicago. Filed May 15, 1931. Serial No. 314,599. Published June 30, 1931. Class 4.

287,115. Animal Fly Sprays, Insecticides, Insect Repellents. Standard Oil Company of California, Wilmington, and San Francisco. Filed May 11, 1931. Serial No. 314,430. Published July 7, 1931. Class 6.

287,117. Disinfectant. Goedrich Chemical Co.,

Park Ridge, N. J. Filed May 16, 1931. Serial No. 314,642. Published July 7, 1931. Class 6.

287,120. Liquid Shampoo. Harry Altrogge, Dallas. Filed May 21, 1931. Serial No. 314,832. Published July 7, 1931. Class 6.

287,134. Dental Cream. Colgate-Palmolive-Peet Co., Chicago. Filed May 1, 1931. Serial No. 314,040. Published July 7, 1931. Class 6.

287,223. Shampoo. Stanhope Laboratories, Brooklyn. Filed August 8, 1930. Serial No. 304,393. Published July 7, 1931. Class 6.

287,248. Shaving Cream. Snoball Co., St. Louis. Filed September 22, 1930. Serial No. 305,951. Published July 7, 1931. Class 4.

287,252. Stove Polish. Lucky Kat Stove Polish Co., Peabody, Mass. Filed December 19, 1930. Serial No. 309,172. Published June 30, 1931. Class 4.

287,288. Cleaning and Washing Powders. Engelite Products Co., New York. Filed January 13, 1931. Serial No. 309,889. Published April 14, 1931. Class 4.

287,289. Soap in Comminuted Form. Procter & Gamble Co., Cincinnati. Filed December 18, 1930. Serial No. 309,140. Published February 3, 1931. Class 4.

287,293. Cleansing, Antiseptic, and Germicidal Compounds. Clorox Chemical Co., Oakland, Calif. Filed January 14, 1931. Serial No. 309,921. Published June 23, 1931. Class 6.

287,360. Preparation for the Extermination of Rats and Mice. Draun Laboratories, Baltimore. Filed May 11, 1931. Serial No. 314,401. Published July 7, 1931. Class 6.

287,370. Insecticide. Vermel Co., Sioux Falls, S. Dak. Filed May 6, 1931. Serial No. 314,228. Published June 23, 1931. Class 6.

286,416. Insecticide. Disinfectant and Detergent. Leffingwell Rancho Co., Whittier, Calif. Filed December 22, 1930. Serial No. 309,247. Published June 9, 1931. Class 6.

286,437. Toilet Soap and Shaving Cream. Colgate-Palmolive-Peet Co., Chicago. Filed April 27, 1931. Serial No. 313,832. Published June 16, 1931. Class 4.

286,441. Shoe Polish. Lyons & Co., New York. Filed April 9, 1931. Serial No. 313,139. Published June 16, 1931. Class 4.

286,443. Cleaning Powder and Metal Polish. Erasm Chemical Corp. of America, Cincinnati. Filed April 7, 1931. Serial No. 313,030. Published June 9, 1931. Class 4.

286,446. Soaps. D'Orsay Perfumeries Corp., New York. Filed March 21, 1931. Serial No. 312,366. Published June 9, 1931. Class 4.

286,448. Cleaning Compounds. Absorene Manufacturing Co., St. Louis. Filed March 13, 1931. Serial No. 312,081. Published June 9, 1931. Class 4.

New Patents

Conducted by
Lancaster, Allwine & Rommel

Registered Attorneys
PATENT AND TRADE-MARK CAUSES
402 Ouray Building, Washington, D. C.

Complete copies of any patents or trade-mark registrations reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-mark Law will also be freely answered by these attorneys.

No. 1,817,157. Soap Frame. Patented August 4, 1931, by Elmer R. Luckow, Chicago, Illinois, assignor to Allen B. Wrisley Co., Chicago, Illinois. A soap frame comprising a truck bottom, a housing having inclined walls removably supported thereon, and a coating of non-saponifiable material applied to the inner surfaces of the housing to obviate the adherence of soap to the housing.

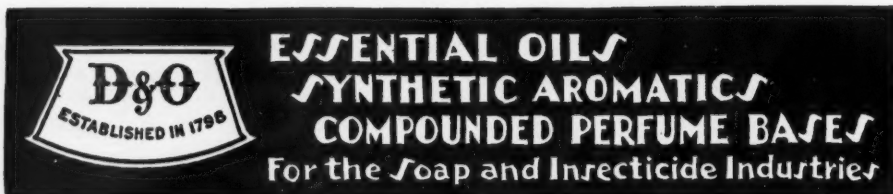
No. 1,817,276. Cleaning Composition. Patented August 4, 1931, by Thomas J. Stinson, Hartford, Connecticut. A cleaning composition formed by mixing chloride of lime, Prosperity soda and vinegar in substantially the proportion of two and one-half pounds of chloride of lime, two and one-half pounds of Prosperity soda, and one-half pint of vinegar.

No. 1,817,582. Cleaning Composition. Patented August 4, 1931, by Sherman W. Putnam and Noland Poffenberger, Midland, Michigan, assignors to The Dow Chemical Company, Midland, Michigan. A composition of matter consisting of a mixture of carbon tetrachloride and propylene dichloride.

No. 1,818,699. Toilet Preparation. Patented August 11, 1931, by Henry G. Dusenbury, Essex Fells and Samuel Isermann, Summit, New Jersey. A toilet preparation for application to the face having for its principal ingredient a titanium salt of stearic acid.

No. 1,819,399. Media for Combating Animal and Vegetable Pests. Patented August 18, 1931, by Georg Wesenberg, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. As a new medium for combating animal and vegetable pests the sodium salt of hydrazoic acid.

No. 1,820,744. Soap Manufacture. Patented August 25, 1931, by Charles F. Kagebehn, Hoboken, N. J., assignor to R. T. Vanderbilt Co., Inc., New York, N. Y. Soap comprising a fatty acid compound and 4-hydroxydiphenyl.



OIL PATCHOULY "D & O"

Distilled by ourselves, is of highest quality and absolutely pure.

OIL PATCHOULY SOAPMAKERS'

A blend of pure "D. & O." Patchouly Oil with synthetic bases, of full strength and low cost.

OIL SANDAL "D & O"

Our own distillation—absolutely pure.

OIL SANDAL IMITATION

Closely resembles pure oil and has practically as much perfuming power. It can be used by itself or blended with pure "D & O" Oil to lower your present cost.

DODGE & OLCOTT COMPANY

180 VARICK STREET

NEW YORK, N. Y.

*"The integrity of the house is reflected in the
quality of its products"*

Say you saw it in SOAP!

Market Report on ESSENTIAL OILS AND AROMATICS

(As of October 9, 1931)

NEW YORK—Prices of essential oils continued to drop during the period just concluded, the downward movement being confined to substantial reductions in quotations on certain oils rather than being a general shading of the whole list. The oils chiefly affected were not soap oils, the steepest declines occurring in spearmint, peppermint, orange and clove. Other oils which were quoted lower were bois de rose, citronella (Ceylon), geranium (Bourbon), lemongrass, petit-grain and sandalwood. The market was not, however, entirely without its stronger features. Citronella, (Java), continued the rise which was a feature of last month's market. Cable offerings from the primary market continue to be very bullish. The renewal of the declining tendency in essential oil prices kept buying on a small basis, consumers being willing to take stocks only as they needed them, and refusing to anticipate

future requirements because of the possibility of covering at more favorable prices later on.

OIL ANISE

Another small decline was noted in anise oil quotations this period, being a readjustment to bring local prices into line with reduced shipment offerings. Apparently neither flood nor the threat of war in China has given Chinese suppliers the idea of advancing prices.

OIL BERGAMOT

The bergamot market exhibited weakness this period both here and abroad. Quotations were unchanged from last month, but were regarded as subject to shading even on the best brands.

OIL CITRONELLA

Java oil continued to hold the firm position which it has occupied lately in local markets. Cable offerings have ceased coming in from the primary market, indicating that arrival of

TERPINEOL, C. P.

Water White—Fine Odor—One of the Best
Low Cost Odors for Soaps, Fly Sprays,
Deodorizing Blocks, etc.

MENTHOL, Synthetic

White Crystals with Fine Natural Odor for
mentholated shaving creams, soaps,
shampoos, lotions, creams,

CAMPHOR

Synthetic

THYMOL

U. S. P. Crystals

Products of
Schering-Kahlbaum
A. G., Berlin

SCHERING CORPORATION 110 William Street
New York, N. Y.

Sole Import and Sales Agents in the U. S. A. for the Manufacturers.

Stock Carried at New York



NEW-O-SAPINE

is an ideal superfatting
and neutralizing agent for

Toilet Soaps—
Shaving Soaps—
Shaving Creams

*NEW-O-SAPINE is the only superfatting agent
of its kind and is used the world over.*

- prevents soap from getting rancid, even if stored for many years.
- eventually binds free alkali in the soap to produce an absolutely neutral soap.
- imparts to soap the much desired velvet feel and high gloss.
- improves the lathering quality of the soap.
- enhances the color of the soap.
- increases washing efficiency.
- prevents formation of scale and cracks.
- preserves the perfume of the soap.
- produces a soft thick lather.
- is free from adeps lanae or vaseline.
- is free from water.
- will prevent shrinkage.

*NEW-O-SAPINE will improve any cold made cocoanut oil soap.
Samples and full information will be furnished promptly on request.*

WELCH, HOLME & CLARK CO., Inc.

Established 1838

563-565 Greenwich Street

New York, N. Y.

Sole Agents in U. S. A. and Canada for the Manufacturers

H. WERTHEIM SOEHNE—BERLIN, GERMANY

Say you saw it in SOAP!

future shipments cannot be counted on to cause any early softening of the market.

OIL GERANIUM

Higher quotations were named for Bourbon oil which moved up to an inside price of \$4.00 per pound in some quarters early this period. This reported advance did not hold, and later in the period offers of \$3.80 were reported.

Robert A. Engel, in charge of advertising and sales development for Givaudan-Delawanna, Inc., New York, is the father of a son born October 6 at York House, New York. Both the new arrival and Mrs. Engel were reported doing well. The boy has been named David Chapin Engel.

Herman T. Fritzsche, director general of Schimmel & Co., Miltitz, Germany, returned to Germany early this month after a short visit at the offices of Fritzsche Bros., Inc., New York, American representatives of Schimmel & Co. The principal factor retarding the German export business in essential oils and aromatics, he said, is the great increase in the cost of financing export business. Where the rate on such transactions was formerly about 5% it is now almost 15%. In Mr. Fritzsche's opinion much good would result from liberalization of credits.

Emile Schlienger, president of Bertrand Freres, represented in United States by P. R. Dreyer, Inc., New York, arrived in New York on the *S. S. Paris*, September 17th. Mr. Schlienger reported that the lavender crop would be cut almost in half this year, due to prevailing low prices on lavender oil and flowers. At present selling prices it is difficult to interest laborers in gathering the flowers.

Louis Rapin, vice-president of Antoine Chiris Co., New York, returned to New York on the *S. S. De Grasse*, September 17th, after a trip to France where he spent considerable time in Grasse, Paris and Neuilly.

Dr. Ernest S. Guenther, Fritzsche Bros., Inc., New York, has returned from a five months' trip to Europe where he visited Bulgaria, Germany, France, Spain and Algeria. He reports the Bulgarian rose crop normal, but the French lavender crop only three-fifths the usual size. Production of essential oils in Spain, he says, has practically stopped because of upset conditions following the revolution. The Algerian crop of geranium is expected to be very small, only about a quarter of normal, as a number of old plantations are no longer producing. They are not being replaced by new plantations as this pursuit has been comparatively unprofitable recently.

FREE TO TRAVELERS

*Mail coupon for
valuable credit
coin*



To help you, cash checks in the 24 United Hotel Cities. This coin instantly establishes your identity... avoids delay in checking out. No one else can use it.

To help your Wife or Mother, when they travel alone. Women need United Hotel Credit Coin protection. When necessary to charge hotel services, this coin is the quick way to establish identity. Made of dull silver... fits change purse or key ring.

To help your Business Associates, save time when stopping at United Hotels. They can avoid check-cashing delays with this coin. 4165 executives enjoy its convenience.

Mail Coupon Today. Secure this extra service for yourself and others. There is no charge for issuing or using this coin.

UNITED HOTELS

Say you saw it in SOAP!



COLUMBIA BRAND

98% - 100%
CAUSTIC SODA

76% Na_2O

Solid — Flake
Ground — Liquid

99% - 100%
SODA ASH

58% Na_2O

Light — Dense
Feather

THE COLUMBIA ALKALI CORPORATION

Executive Sales Offices
EMPIRE STATE BUILDING, NEW YORK CITY

Branch Sales Offices
431-451 St. Clair Street . . . CHICAGO
Carew Towers . . . CINCINNATI
Santa Fe Terminal Building . . DALLAS

Plant at BARBERTON, OHIO

Say you saw it in SOAP!

Market Report on SOAP AND DISINFECTANT CHEMICALS

(As of October 9, 1931)

NEW YORK—The market for soap and disinfectant chemicals was without notable developments last period, maintaining a fairly quiet and even tone. Buying continued on a small scale, most users being unwilling to anticipate and taking new material only as needed. The severe drops in quotations on stocks and general commodities failed to affect prices of soap and disinfectant chemicals. As a matter of fact advances were noted in the rosin market on the pale grades. The glycerine market was also in rather firm position due to development of early interest among the manufacturers of anti-freeze preparations. The alkali market moved along on an even keel, with unchanged prices and a satisfactory withdrawal considering the general situation. Substantial drops in quotations were noted in the wax market due to the arrival of new crop material.

ALKALIS

The third quarter of the year ended with a fairly satisfactory month as far as alkali contract withdrawals were concerned, although the spot market was quiet and inactive. Prices have been well maintained through the latter part of the year since the revision in the schedule which was made during the first quarter. As yet there has been no indication as to what prices might be expected for 1932 business.

GLYCERINE

There were no changes in glycerine quotations this period, but a general feeling of steadiness in the market was noted. Interest on the part of the anti-freeze trade has been felt earlier in the season this year, and already inquiries are coming in from this consuming field. The early work of arousing interest on the part of service station and garage operators has been done, and it is now planned to set up a weather warning service for automobile operators.



THE GRASSELLI CHEMICAL CO.
INCORPORATED CLEVELAND

New York Office and Export Office: 350 Fifth Avenue

Albany Birmingham Boston Brooklyn	Charlotte Chicago Cincinnati Detroit		Milwaukee New Haven New Orleans Paterson	Philadelphia Pittsburgh St. Louis St. Paul
--	---	--	---	---

San Francisco—576 Mission St. Los Angeles—363 New High St.

Represented in Canada by CANADIAN INDUSTRIES, Ltd.,
Heavy Chemicals Division, Montreal and Toronto

Grasselli TRI-SODIUM PHOSPHATE

THE Grasselli method of manufacture permits its Tri-Sodium Phosphate to cure. Hence Grasselli T.S.P. is always free flowing.

NON-SIFTING PACKAGES

Grasselli T.S.P. is shipped to you in barrels with paper liner. There is no loss either in transit or storage. Also available in kegs and bags. *Grades:* fine, globular, medium and coarse.

Let Grasselli figure on your T.S.P. requirements. Phone, write or wire any of the branches listed.

“ NIAGARA

*is a guaranty
of purity in*

PARA

”

IT is a manufacturing axiom that Deodorants, Disinfectants and Insecticides are only as good as their base. Niagara Para gives the assurance of dependable strength.



Niagara Para is an always pure product. It should be used to give your production the superiority that wins trade and consumer preference.

Investigate the advantages of Niagara Para, supplied in Quality Crystals.

*Quotations gladly
given upon request*

NIAGARA ALKALI COMPANY

Associated with Electro Bleaching Gas Co.
Pioneer Manufacturer of Liquid Chlorine

9 East 41st Street, New York, N. Y.

Say you saw it in SOAP!

NAVAL STORES

Crop receipts continued to fall off during the recent period, and this season's crop is now running about 70,000 barrels under figures to date for last season. Users continue to buy on a hand-to-mouth basis, taking only enough material for current needs. As a result stocks have not been materially reduced and remain as a bearish factor overhanging the rosin market. The closing quotations this period represented a gain over the record low figures of last period on the pale grades. They follow: Gum Rosin, Grade B, \$3.75; H, \$4.05; K, \$4.15; N, \$5.00; WG, \$6.30; WW, \$6.60; Wood Rosin, \$3.70 to \$3.90; at works, \$2.90.

WAXES

Substantial price reductions were made this period by holders of carnauba wax stocks, due to the expected arrival of a steamer bringing new crop supplies. Other waxes were also weak, reductions being noted in Bees and Japan wax.

A. M. Todd, founder and president of the A. M. Todd Co., Kalamazoo, Mich, pioneer of the American peppermint oil industry and known as the "Peppermint Oil King," and also a manufacturer of aromatic chemicals, died Oct. 6 at the age of 81 at Kalamazoo. He was active in Michigan politics and was a former Congressman.

Opportunities for Export

The following opportunities for export of American soaps and allied products have come to the Bureau of Foreign and Domestic Commerce, Washington, D. C. American manufacturers can secure the full details of the inquiries by communicating with the Bureau, care of the Department of Commerce. Be sure to mention the number of Foreign Trade Opportunity in writing.

53,515	Moth exterminators	Norway	Agency
53,533	Soap and Caustic soda	Costa Rica	Agency
53,633	Toilet soaps, tooth paste and other toilet preparations	Panama	Agency
53,536	Bath salts and toilet preparations	England	Agency
53,636	Toilet and shaving soaps	England	Agency
53,639	Polishes	Canada	Agency
53,640	Household insecticides	Sumatra	Agency or Purchase
53,649	Whale oil soap	Porto Rico	Agency
53,705	Soaps and dental creams	Java	Purchase
53,742	Cresylic acid	New Zealand	Purchase
53,752	Toilet preparations	Japan	Purchase
53,759	Laundry soaps	Dominican Republic	Agency
53,808	Polishes	Brazil	Agency

Percy E. Anderson has returned to the business of importing and exporting crude drugs, essential oils and chemicals on his own account, and has established offices at 60 John street. His telephone number is Beekman 3—3921.

Turn CLAIMS Into ACCLAIM



-- By Shipping in NILES Steel Containers

*B*ANISH complaints and build customer enthusiasm by using a smart looking, beautifully imprinted NILES Steel Container.

"A Perfect Seal and the Strength of Steel" means leak-proof arrival always. We offer all capacities in wide range of types and closures for every product requirement.

The illustration shows the NILES Lugseal, furnished in 2½ to 6½ gallon capacity. Any label design beautifully reproduced in colors.

The Niles Steel Products Co.

NILES

MANUFACTURERS

NILES
STEEL CONTAINERS

OHIO

Say you saw it in SOAP!

**for your Dry Cleaning Soaps, Shaving Soaps,
Special Cleaners, Liquid Soaps, Polishes, etc.**



STEARIC ACID

Distilled

Saponified

RED OIL

*Elaine Brands
Distilled Saponified*

FATTY ACIDS

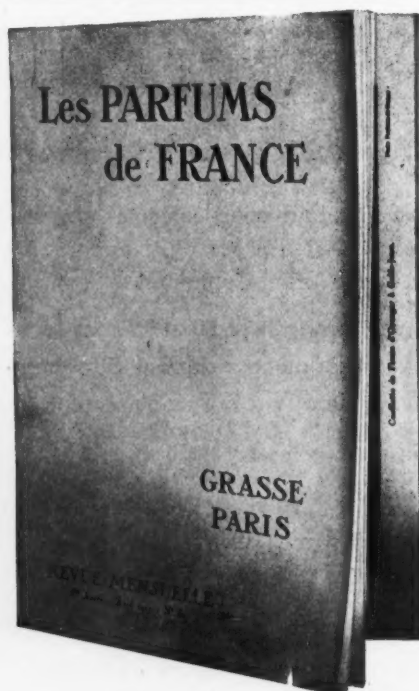
EMERY INDUSTRIES, Inc., Cincinnati, Ohio

Woolworth Building

New York Office:

Phone COrtlandt 7-1742-1743

Stocks Carried in All Principal Cities



BRINGS TO SOAPMAKERS EVERY MONTH:

- Information about cultivation of aromatic plants.
- The latest quotations of the Grasse Floral Products and Essential Oils.
- Monographs and complete scientific articles concerning the Essential Oils and Aromatics of every country.
- Formulæ for use of Aromatic raw materials in Perfumes, Cosmetics, Soaps, Drugs and Flavors.
- First-class illustrations both in color and in black.

The articles are written in both English and French by the most able specialists.

Yearly subscription\$4.00

Specimen copy 0.25

Head-Office: in GRASSE, Avenue de la Gare.
in PARIS, Avenue Victor-Emmanuel III.

Say you saw it in SOAP!

Market Report on TALLOW, GREASES AND OILS

(As of October 9, 1931)

NEW YORK—Prices of soapmaking fats, oils and greases continued to plunge downward during the period just closed, breaking through previous low levels which had been thought by many to mark the bottom of the declining price curve. New low prices were set for cottonseed oil bringing in turn lower prices on such competing oils as corn and soya bean oils. The drop in cottonseed oil was accentuated by a weakening in general business sentiment during the period which followed another disastrous series of declines in the securities markets. Coconut oil also dropped off fractionally, although it had already sunk to such a low level that further declines were not looked for. The only item in the list of oils and fats to exhibit any firmness was tallow. Light offerings prompted a fractional advance in tallow prices. The main factor which keeps oil and fat prices at present low levels still continues to be a subnormal consumption of these products in most industries. With tremendous stocks available, and little consuming interest shown, buyers are

in strong position to control the market, buying when they want and at almost any prices they choose to name.

COCONUT OIL

Coconut oil again dropped off a quarter of a cent a pound this period, as users continued to show lack of interest in extending commitments. New York Manila tanks are now offered at $3\frac{1}{4}$ c. lb. Copra was also quoted lower on the coast, ranging from $1\frac{3}{4}$ c. to $1\frac{7}{8}$ c. lb.

CORN OIL

This period saw the sharpest declines in corn oil quotations which have been noted since the start of the present downward movement in oils. The price of crude corn oil tanks dropped from $5\frac{1}{8}$ c. at the beginning of the period to $3\frac{7}{8}$ c. at the close. This drop was directly traceable to weakness in cottonseed oil and in the grain markets.

COTTONSEED OIL

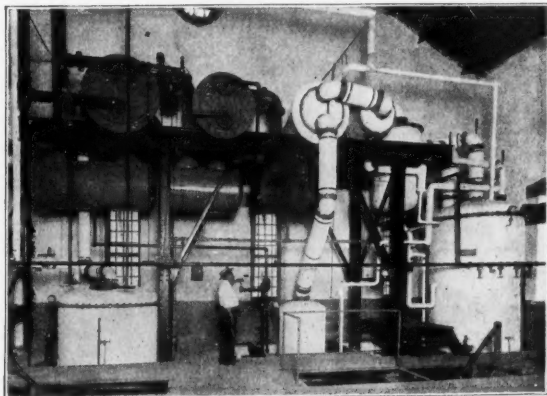
Cottonseed oil was the leader in the downward plunge of oil and fat prices this period, breaking



GLYCERINE REFINING PLANTS

The most efficient Glycerine Refining Plant operating with the lowest refining loss and the highest yield of finished product.

The outstanding features of the WURSTER & SANGER process and equipment are:



WURSTER & SANGER GLYCERINE DISTILLATION PLANT

1. Highest yield of distilled glycerine.
2. Highest percentage of finished glycerine obtained on direct distillation, eliminating rehandling and losses.
3. Lowest steam consumption.
4. Extreme simplicity of operation.
5. Compactness of the plant.
6. Low operating costs.

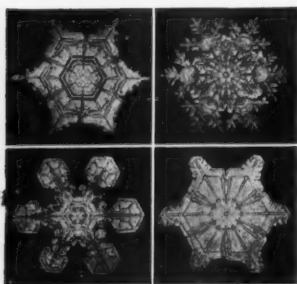
New Plants Designed—

Old Plants Remodeled

Complete Plants for

Crude, Dynamite and C. P. Glycerine
Laundry, Toilet and Liquid Soaps
Spray-Process Soap Powder
Fatty Acid Distillation
Fat Splitting, Stearic Acid and Red Oil
Refining of Fats and Oils
Hydrogenation of Oils

WURSTER & SANGER, INC.
5201 Kenwood Avenue
Chicago



CRYSTALITE

***A Bleached Coconut Oil
Refined to the Kellogg Standard***

WITH the manufacturers of soap who desire a coconut oil lighter in color than Manila Crude, Kellogg's *Crystalite* has become an outstanding favorite.

Crystalite is refined from high quality copra, then scientifically bleached to a maximum of 2.5 red and 20. yellow. Free fatty acid content is between 2.5 and 4.5.

There are five Spencer Kellogg grades of coconut oil. In the purchase of any one you derive the benefits of Kellogg quality, dependable uniformity and better service — made possible by the fact that Spencer Kellogg and Sons control every step in production, from the purchase of the raw copra to the delivery to their many customers.

Use only the best. Get in touch with the nearest Kellogg warehouse.



SPENCER KELLOGG AND SONS SALES CORP'N.

Administration Offices and Research Laboratories

BUFFALO, N. Y.



CRUSHING PLANTS—Manila, P. I. REFINERIES—Edgewater, N. J.; Kansas City, Kan.; NEW YORK OFFICES—Graybar Bldg.; WAREHOUSE STOCKS at Baltimore, Boston, Chicago, Cincinnati, Cleveland, Detroit, Kansas City, Milwaukee, New York City, Philadelphia, St. Louis

Tank Wagon Service in Greater New York

Kellogg's Coconut Oils

MANILA (Crude) - CRYSTALITE - SILVER SEAL COCHIN - KOLINE (Edible) - HYDROGENATED

Say you saw it in SOAP!

through to new low levels for this and many recent seasons. Crude oil dropped off to $3\frac{1}{8}$ c. lb., with P S Y reduced to $3\frac{7}{8}$ c. on the local exchange. Several immediate factors were responsible for the decline, chief among these being the renewed downward movement of stock and commodity prices. Another factor in the decline was the receipt of favorable crop reports from cotton producing states. A substantial crop is expected this year, and up to this time no move to reduce next year's crop has met with any success.

SOYA BEAN OIL

Quotations on soya bean oil were reduced substantially this month by domestic producers who found themselves forced to this expedient to dispose of their holdings. Domestic tanks dropped from $5\frac{1}{2}$ c. to $4\frac{1}{2}$ c. lb., and in some quarters it was reported possible to shade the latter quotation. Weakness of competing products was the chief factor in the decline.

TALLOW

One of the few items in the list of soapmaking materials to resist the general tendency toward decline was tallow. Being in small supply sellers were not anxious to force matters. When a slightly better inquiry developed late in the period they were able to push the price of city extra tallow up $\frac{1}{8}$ c. lb. to $27\frac{7}{8}$ c. lb., inside.

Oil Chemists Meet

(From Page 45)

Atmospheric Oxidation," H. Aspegren, Norfolk Research Corporation, Norfolk, Va.

2. "A Process for Refining and Deodorizing Oils," V. Conquest, Armour & Company, Chicago, Ill.

3. "Oils and Fats as Food for Mammals and Micro-organisms," L. B. Jensen, Swift & Company, Chicago, Ill.

4. "Some Observations on Oil Refining in Europe," R. W. Perry, William Davies Co., Chicago, Ill.

5. "Feed Control and Some Recent Developments," H. A. Halvorson, Minnesota State Department of Agriculture, St. Paul, Minn.

6. "The Significance of the Recent Rapid Growth in Whale Oil Production," R. W. Harrison, Bureau of Fisheries, Gloucester, Mass.

7. "The Technology of Whale Oil," A. P. Lee, MacNair-Dorland Co., New York, and H. P. Trevithick, Bureau of Chemistry, New York.

8. "Commercial Aspects of the Uses of Sunflower Seed Oil, Sesame Oil, and Soya Bean Oil," G. G. Fox, Armour & Company, Chicago.

9. "Mayonnaise Oils, Mayonnaise, and the Kreis Test," A. G. Olson, General Foods Corporation, and C. A. Southwick, Jr., General Foods Corporation.



The picture above shows the 2 units of the Solutionizer: The top unit consists of the adjustable cap, outlet pipe, and inlet hose connection. The bottom unit consists of the plug which screws into bung hole of drum, and the steel pipe which carries incoming water to bottom of drum. Note the notches in the cap and the offset on the plug. These allow the cap to be firmly adjusted to produce solution of desired richness.

The Plug Type Solutionizer CONTROLS SOAP CONSUMPTION

THE Plug Type Solutionizer makes soap and water mixing as simple as drawing water from a faucet. It saves time and labor by eliminating wasteful hand-mixing.

Furthermore—the Solutionizer controls soap consumption by regulating the consistency of soap and water solutions. It can be adjusted to produce 8 solutions of varying richness.

Manufacturers who help their customers save will have increased business. The Solutionizer may be installed in soap drums before shipping like a bung plug. Its price is extremely low. Please write for details.



Here it is installed in soap drum. Turn water into inlet and hold bucket under outlet pipe for suds.

THE SOLUTIONIZER CO. 1449 W. 69th ST. CHICAGO, ILL.

Distributed West of the Rockies by TURCO PRODUCTS, INC., 1512 Industrial St., Los Angeles, Cal.

Say you saw it in SOAP!

S-348 Blue Green G. C.
 S-310 Chloro Green
 S-315 Light Olive Green
 S-341 Palm & Olive Green
 S-343 Emerald Green P.O.
 S-365 Lettuce Green
 S-355 Rhodamine B Ex.
 (500% color)

S-323 Pink R.
 S-278 Shell Pink
 S-351 Pink Y
 S-350 Rose
 S-363 Scarlet
 S-364 Red for Carbolie
 soaps

S-300 Uranine A
 (Fluorescene)

S-370 Chloro Opal
 S-316 Lemon Yellow
 S-318 Golden Yellow
 S-319 Canary Yellow
 S-320 Orange

S-271 Amber
 S-339 Amber B. B.

S-342 Black

S-524 Blue (Ultramarine
 shade)

S-347 Royal Blue
 S-333 Violet

S-255 Lilac

S-256 Heliotrope



PYLAM COLOR SERVICE

for the

SOAP INDUSTRY

You can use Pylam Fast Soap Colors with confidence. They represent the pick of years of research and actual plant use.

The colors listed at the left are fast to alkali, light heat and ageing.

We recommend them for COLD PROCESS, HALF-BOILED, BOILED SOAPS, POTASH SOAPS and SOAP BASES.

Send for free samples.

Send for complete price list.

PYLAM PRODUCTS COMPANY

Manufacturing Chemists—Importers—Exporters

53 PARK PLACE

NEW YORK, N. Y.



GERANIOL

for SOAP

**In various grades to meet
 every requirement as to price**



A. M. TODD COMPANY

KALAMAZOO, MICH.

Business established in 1869

Say you saw it in SOAP!

CURRENT PRICE QUOTATIONS

Chemicals

Acetone, C. P., drums.....lb.	.10	.11	Kieselguhr, bagston	—	35.00
Acid, Boric, bbls., 99½%.....ton	135.00	162.50	Lanolin, see Adeps Lanae.		
Cresylic, 97% dk., drums.....gal.	.47	.48	Lime, live, bbls.....per bbl.	1.70	2.20
97-99%, pale, drums.....gal.	.54	.58	Menthol, caseslb.	3.50	3.75
Formic, 90%, tech.....lb.	.10½	.12	Synthetic, tinslb.	3.00	3.60
Oxalic, bbls.....lb.	.11	.11¼	Mercury Bichloride, kegs.....lb.	1.35	1.50
Adeps Lanae, hydrous, bbls.....lb.	.14	.15	Naphthalene, ref. flakes, bbls.....lb.	.04	.05¼
Anhydrous, bbls.....lb.	.15	.16	Nitrobenzene (Myrbane) drums....lb.	.09½	.11
Alcohol, Ethyl, U. S. P., bbls.....gal.	2.42	2.56	Paradichlorobenzene, bbls., kegs....lb.	.15	.23
Complete Denat., No. 5, drums., ex. gal.	.27	.29	Paraformaldehyde, kegslb.	.38	.39
Alum. potash lump.....lb.	.03	.03¼	Petrolatum, bbls. (as to color)....lb.	.02	.08
Ammonia Water, 26°, drums, wks...lb.	.02¾	.03	Phenol, (Carbolic Acid), drums....lb.	.14¼	.16
Ammonium Carbonate, tech., bbls...lb.	.10½	.11½	Pine Oil, bbls.....gal.	.55	.61
Bleaching Powder, drums.....100 lb.	2.00	2.60	Potash, Caustic, drums.....lb.	.06½	.06¾
Borax, pd., cryst., bbls., kegs.....ton	66.00	77.50	Flakelb.	.07	.08
Carbon Tetrachloride, car lots....lb.	—	.06¼	Potassium Bichromate, casks.....lb.	.08¾	.09½
L. C. L.....lb.	.06½	.07	Pumice Stone, powd.....100 lb.	2.50	4.00
Caustic, see Soda Caustic, Potash			Rosins (600 lb. bbls. gross for net)—		
Caustic			Grade B to H, basis 280 lbsbbl.	3.75	4.05
China Clay, filler.....ton	10.00	25.00	Grade K to Nbbl.	4.15	5.00
Cresol, U. S. P., drums.....lb.	.12½	.15	Grade WG and WWbbl.	6.30	6.60
Creosote Oil tanks.....gal.	.13	.16	Woodbbls.	3.70	3.90
Formaldehyde, bbls.lb.	.06	.07	Rotten Stone, pwd. bbls.....lb.	.02½	.04½
Fullers Earth.....ton	15.00	24.00	Silica, Ref., floated.....ton	18.00	22.00
Glycerine, C. P., drums.....lb.	.11½	.12	Soap, Mottled 40 lb. box.....lb.	—	.12
Dynamite, drumslb.	.09¾	.09¾	Olive Castile, bars, powder.....lb.	.12	.22
Saponification, tankslb.	.06½	.07½	Powdered White, U. S. P.....lb.	.14	.16
Soaps, Lye, tanks.....lb.	.05½	.05¾	Green, U. S. P.....lb.	.06½	.07½
Hexalin, drumslb.	—	.60	Tallow Chipslb.	.07½	.08
			Whale Oil, bbls.....lb.	.04	.04½



Caustic Soda
High Grade—Solid or Liquid Form

Carbon Tetrachloride
Redistilled—water white—supplied also in combination
with other solvents to meet individual requirements

Tri-Sodium Phosphate
Fine granular and powdered. Free-flowing and
non-caking

The WARNER CHEMICAL CO.

Chrysler Bldg.

New York City

Phone MUrray Hill 2—0262



**Certainly your Mother
uses that Cleaner . . .
. . . 'most everybody does**

The one sure way to speed sales and pyramid resales of water softeners and cleaners is to formulate them with Aero Brand T-S-P. Original excellent mechanical condition is carried through to consumer. Retailers are glad to boost first sales for your improved goods. Resales mount. You profit from increased sales and reduced selling resistance.

Aero Brand fines and crystals are carefully cured and precisely screened. All possible moisture absorption is elimi-

nated in our processing and packing. Strength and purity run uniform through repeated shipments. Aero Brand T-S-P is invariably free-flowing. It dissolves quickly.

Packed in non-sifting, paper-lined containers Aero Brand reaches you in the best possible condition. The location of our plants at Warners, New Jersey, on New York Harbor, assures prompt shipments by water, rail or truck. Let us quote you.

Industrial Chemicals Division

American Cyanamid Company

535 Fifth Avenue New York

Say you saw it in SOAP!



**T
S
P**

Soda Ash, contract, wks., bags, bbls. 100 lb. \$1.12½ \$1.25	Lard, prime, steam, tierceslb. \$0.07 \$0.07½
Soda Caustic, Cont., wks., sld...100 lb. — 2.50	Compound tierceslb. .06¾ .07¾
Flakelb. — 2.90	Lard Oil,
Liquid, tankslb. — 2.20	Extra, bbls.lb. — .07¾
Soda Sal., bbls.....100 lb. 1.00 1.15	Extra, No. 1, bbls.lb. — .07½
Sodium Chloride (Salt).....ton 11.40 14.00	No. 2, bbls.lb. — .07
Sodium Fluoride, bbls.....lb. .08¼ .09½	Linseed, raw, bbls., spotlb. .0720 .0760
Sodium Hydrosulphite, bbls.....lb. .22 .23	Tanks, rawlb. — .0660
Sodium Silicate, 40 deg., drum, 100 lb. .75 .80	Boiled, 5 bbls. lotslb. — .0840
Drums, 60 deg. wks.....100 lb. — 1.65	Menhaden, Crude, tanks, Balt.....gal. — .15
In tanks, 15c. less per hundred, wks.	Oleo Oil, No. 1, bbls., N. Y.....lb. — .06¾
Tar Acid Oils, 15-25%.....gal. .24 .28	No. 2, bbls., N. Y.....lb. — .06¾
Trisodium phosphate, bbls.lb. .03 .03½	Olive, denatured, bbls., N. Y.gal. .72 .76
Zinc Oxide, lead free.....lb. .06½ .07	Foots, bbls. N. Y.lb. .04¾ .04¾
Zinc Stearate, bbls.....lb. .22 .24	Palm, Lagos, casks, spotlb. .04 .04¼
	Shipmentslb. — .03¾
	Niger casks, spotlb. .03½ .03¾
	Shipmentslb. — .03¼
	Palm Kernel, casks, denaturedlb. — .05½
	Tank cars, denaturedlb. — .04¾
	Peanut, imported tanks, N. Y.lb. — .05¼
	Red Oil, distilled, bbls.....lb. .07¾ .08¾
	Saponified, bbls.lb. .07¾ .08¾
	Tankslb. .07 .07½
	Soya Bean, domestic tanks, N. Y...lb. .04½ .04¾
	Manchurian, pressed, N. Y.....lb. — .07¼
	Stearic Acid
	Double pressedlb. .08½ .09
	Triple pressed, bgs.....lb. .11 .11½
	Stearine, oleo, bbls.lb. .07¼ .07¾
	Tallow, special, f. o. b. plantlb. .02½ .02¾
	City, ex. loose, f. o. b. plant ...lb. — .02¾
	Tallow, oils, acidless, tanks, N. Y. ...lb. — .06¼
	Bbls., c/1, N. Y.lb. — .06¾
	Whale, nat. winter. bbls., N. Y....gal. .65 .67
	Blchd., winter. bbls., N. Y.gal. .67 .69
	Extra blchd., bbls., N. Y.gal. .70 .72

Oils—Fats—Greases

Castor, No. 1, bbls.....lb. .11¾ .12	
No. 3, bbls.....lb. .11¾ .11½	
Coconut, tanks, N. Y.lb. — .03¼	
Tanks, Pacific Coastlb. .03 .03½	
Tanks, Chicagolb. .03¾ .03¾	
Cod, Newfoundland, bbls.gal. — .30	
Copra, bulk, Coastlb. .0175 .0185	
Corn, tanks, millslb. .03¾ .04	
Bbls., N. Y.lb. .05¾ .06	
Cottonseed, crude, tanks, milllb. .03¼ .03¼	
PSYlb. — .03¾	
Degras, Amer., bbls.....lb. .03¼ .04	
English, bbls.lb. .04¼ .04½	
German, bbls.lb. .03½ .03¾	
Neutral, bbls.lb. .06¾ .08½	
Greases, choice white, bbls., N. Y...lb. .02¾ .03¾	
Yellowlb. .02¼ .02¾	
Houselb. .02¼ .02¾	

USE STAUFFER BRAND

Carbon Tetrachloride

in your liquid cleaners

STAUFFER BRAND Carbon Tetrachloride will make a good cleaner better. It is 99.9% pure, the purest obtainable anywhere, is water white and is absolutely free from

residue or residual odor. May we work with you when you are next in the market? Let us submit samples and prices. Anything from a drum up.

Also producers of

CAUSTIC SODA

STAUFFER CHEMICAL COMPANY

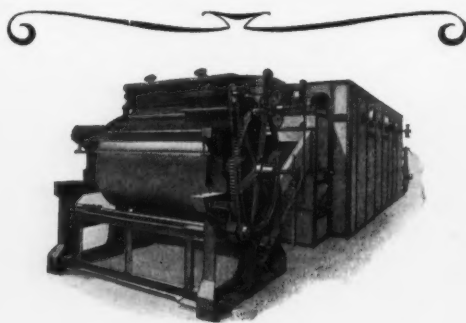
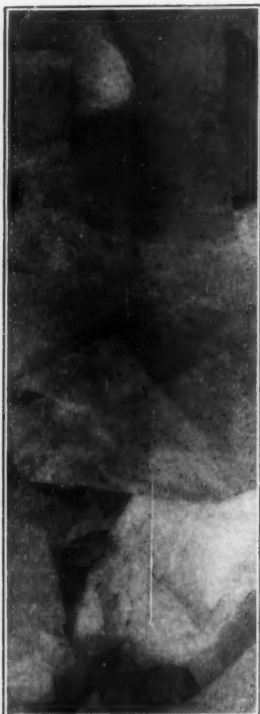
Plants

Niagara Falls, N. Y.
Los Angeles, Cal.

Office

420 Lexington Ave.
New York City

Say you saw it in SOAP!



THIN CHIPS!

This new Proctor Dryer produces Soap Chips of transparent thinness—exactly the kind now in popular demand for package laundry soap—also the chip that can be produced most efficiently in making cake toilet soap.

New throughout—new chilling rolls—new dryer, this machine not only produces the most satisfactory soap chip, but it excels in high capacity, saving of floor space, reduced steam consumption, low cost of operation. Write.

PROCTOR & SCHWARTZ, Inc.
PHILADELPHIA

*always
uniform*

Uniformly brilliant white crystals—
uniformly of the size ordered: flake,
fine or powdered—and uniformly
free-flowing—that's Victor Tri-Sodium
Phosphate.

Victor Chemical Works
343 S. Dearborn St., Chicago, Ill.
New York Nashville St. Louis Kansas City

that's
VICTOR
TSP

WORLD'S LARGEST MAKERS OF PHOSPHATES

Say you saw it in SOAP!

Essential Oils

Almond, Bitter, U. S. P.....lb.	2.25	2.50	Hemlock, tinslb.	.90	.95
Bitter, F. F. P. A.....lb.	2.65	2.80	Lavender, U. S. P., tins.....lb.	2.00	3.50
Sweet, canslb.	.45	.47	Spike, Spanish, canslb.	.60	.75
Apricot, Kernel, cans.....lb.	.26	.28	Lemon, Ital., U. S. P.....	.90	1.20
Anise, canslb.	—	—	Lemongrass, native, cans.....lb.	.44	.45
U. S. P., canslb.	.42	.44	Linaloe, Mex., cases.....lb.	1.80	1.95
Bay, tinslb.	1.90	2.00	Neroli, Artificiallb.	10.00	20.00
Bergamot, copperslb.	1.85	2.00	Nutmeg, U. S. P., tins.....lb.	1.20	1.30
Artificiallb.	1.35	1.50	Orange, Sweet, W. Ind., tins.....lb.	1.75	1.90
Birch Tar, rect., bot.lb.	.45	.50	Italian cop.lb.	1.85	2.30
Crude, tinslb.	.13	.14	Distilledlb.	.80	.90
Bois de Rose, Brazilian.....lb.	.60	.65	Origanum, cans, tech.lb.	.25	.40
Cayennelb.	1.15	1.30	Patchoulilb.	4.75	5.50
Cade, canslb.	.26	.27	Pennyroyal, dom.lb.	1.55	1.60
Cajuput, native, tinslb.	.60	.65	Importedlb.	1.10	1.15
Calamus, bot.lb.	2.75	3.00	Peppermint, nat. cases.....lb.	1.60	1.70
Camphor, Sassy, drums.....lb.	.21	.23	Redis., U. S. P., cases.....lb.	1.80	1.90
White, drumslb.	.16	.18	Petit Grain, S. A., tins.....lb.	1.10	1.20
Cananga, native, tins.....lb.	1.75	1.90	Pine Needle, Siberianlb.	.60	.63
Rectified, tinslb.	2.20	2.30	Rose, Naturaloz.	9.50	14.00
Caraway Seedlb.	1.55	1.65	Artificialoz.	2.00	2.75
Cassia, Redistilled, U. S. P., cans...lb.	1.00	1.10	Rosemary, U. S. P., drums.....lb.	.40	.45
Cedar Leaf, tinslb.	.90	1.00	Tech., lb. tinslb.	.33	.35
Cedar Wood, light, drums.....lb.	.39	.41	Sandalwood, E. Ind., U. S. P.....lb.	7.50	8.00
Citronella, Java, drumslb.	.56	.58	Sassafras, U. S. P.....lb.	1.00	1.20
Citronella, Ceylon, drums.....lb.	.36	.38	Artificiallb.	.27	.29
Cloves, U. S. P., cans.....lb.	1.25	1.30	Spearmint, U. S. P.....lb.	1.40	1.55
Eucalyptus, Austl., U. S. P., cans...lb.	.33	.35	Thyme, red, U. S. P.....lb.	.50	.65
Fennel, U. S. P., tins.....lb.	1.00	1.10	White, U. S. P.lb.	.85	.90
Geranium, African, canslb.	4.00	4.50	Vetivert, Bourbonlb.	4.50	5.00
Bourbon, tinslb.	3.80	4.50	Javalb.	16.00	20.00
			Ylang Ylang, Bourbonlb.	5.25	6.50

ESSENTIAL OILS AROMATIC CHEMICALS

CASSIE S. N.

A powerful and tenacious oil of particular interest to soapmakers: remarkably effective for violet odors and bouquet types.

OAK MOSS RESIN

An outstanding raw material for the perfuming of soaps.

FLOSAL

The original Amyl Cinnamic Aldehyde.

LAVENDER OIL

Extremely low prices, finest qualities.

BENJ. FRENCH, INC.

160 Fifth Avenue

New York

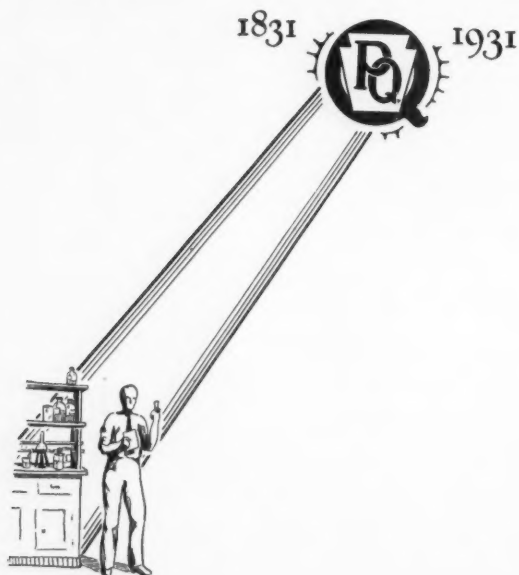
Agents for
DESCOLLONGES FRERES
Lyon, France

Agents for
PILAR FRERES
Grasse, France

CHICAGO OFFICE
549 W. Randolph Street

Say you saw it in SOAP!

FORWARD *with*



P.Q. SILICATES

CONFIDENCE in your source of supply relieves you of many worries. The certainty that . . .

. . . P. Q. Silicates will meet your requirements today, tomorrow and always—

. . . deliveries can be made promptly from the nearest of eight plants located to best serve your industry—

. . . if you have a problem involving silicate, an experienced technical department intelligently studies it and usually knows the answer—

. . . develops a sense of reliability that is priceless to the forward looking manufacturer.

Right now is an opportune time to become acquainted with P.Q. Silicates and P.Q. Service. May we have the pleasure of talking it over with you?

1831 — Beginning Another Century — 1931

PHILADELPHIA QUARTZ COMPANY

General Offices

121 S. Third St. Philadelphia

Chicago Office: 205 W. Wacker Drive

Sell and ship in ... STEEL

1 TO 65 GALLON SIZES

the Shipping and Pouring Pails



If you want to discover the economy and advantage of shipping in steel any product, liquid, dry or solid, allow us to discuss your requirements with you.

As the manufacturer of the most complete line of plain and lithographed steel shipping containers, we are confident of our ability to submit a package adaptable to your product. And our Engineering and Traffic Departments will be glad to help.

Above is shown one of the most widely used style of pail in the paint, oil and chemical industries and the two different covers with which it may be equipped. Write for our set of catalogues so that you will immediately know what we can offer your product.

WILSON & BENNETT MFG. CO.

General Offices: 6538 S. Menard Ave.
CHICAGO

Eastern Offices: 39 Cortlandt St.
NEW YORK

Sales Offices in Chief Cities

Say you saw it in SOAP!

Aromatic Chemicals

Acetophenone, C. P.lb.	\$3.00	\$4.25
Amyl Cinnamic Aldehyde.....lb.	3.75	4.25
Anethollb.	1.40	1.60
Benzaldehyde, tech.lb.	.60	.65
U. S. P.lb.	1.35	1.45
Benzyl, Acetatelb.	.75	1.10
Alcohollb.	1.00	1.40
Citrallb.	2.75	3.35
Citronellallb.	1.50	2.00
Citronellollb.	2.60	4.50
Citronellyl Acetatelb.	5.00	8.00
Coumarinlb.	3.60	4.00
Diphenyl oxidelb.	1.15	1.25
Eucalyptol, U. S. P.....lb.	.62	.80
Eugenol, U. S. P.....lb.	3.00	3.75
Geraniol, Domesticlb.	1.65	2.00
Importedlb.	2.00	2.35
Geranyl Acetatelb.	2.50	3.50
Heliotropin, dom.lb.	1.90	2.00
Importedlb.	2.25	2.30
Hydroxycitronellallb.	4.00	6.00
Indol, C. P.oz.	2.50	5.00
Iononelb.	4.00	6.50
Iso-Eugenollb.	4.00	5.50
Linaloollb.	2.10	3.50
Linalyl Acetatelb.	3.00	3.75
Menthollb.	3.50	4.00
Methyl Acetophenonelb.	2.10	2.90
Anthranilatelb.	2.20	2.60
Paracresollb.	8.00	9.00
Salicylate, U. S. P.....lb.	.40	.45
Musk Ambrettelb.	6.50	7.25
Ketonelb.	6.50	7.50
Moskenelb.	5.40	5.90
Xylenelb.	2.50	3.00

Phenylacetaldehydelb.	\$4.00	\$7.00
Phenylacetic Acid, 1 lb., bot.....lb.	3.00	4.00
Phenylethyl Alcohol, 1 lb. bot.....lb.	4.15	4.50
Rhodinollb.	5.50	12.50
Safrollb.	.29	.31
Terpineol, C. P., 1,000 lb. drs.....lb.	.30	.33
Canslb.	.33	.36
Terpinyl Acetate, 25 lb. cans.....lb.	.80	1.15
Thymol, U. S. P.....lb.	1.80	2.00
Vanillin, U. S. P.lb.	4.50	5.75
Yara Yaralb.	1.60	2.50

Insect powder, bbls.lb.	.18	.22
Concentrated Extractgal.	1.50	1.75

Gums—

Arabic, Amb. Sts.lb.	.08 1/4	.08 3/4
White, powderedlb.	.15	.17
Karaya, powderedlb.	.21	.22
Tragacanth, Aleppo, No. 1.....lb.	1.23	1.40
Sortslb.	.40	.45
Turkish, No. 1.....lb.	.90	.95

Waxes—

Bayberry, bgs.lb.	.19	.22
Bees, whitelb.	.34	.38
African, bgs.lb.	.19	.20
Refined, yel.lb.	.25	.30
Candelilla, bgs.lb.	.13	.14
Carnauba, No. 1lb.	.33	.34
No. 2, Yel.lb.	.31	.32
No. 3, Chalkylb.	.11	.12
Japan, caseslb.	.07 3/4	.08
Paraffin, ref. 125-130.....lb.	.03 3/4	.04 1/8

Water Soluble Perfumes for Theatre Sprays

LILAC W. S.
ROSE W. S.

CARNATION W. S.
JOCKEY CLUB W. S.

FRESIA W. S.
and others

*These oils are clearly soluble in water
You will need only four ounces to one gallon*

Also Special Odors for

Cake Soaps --- Liquid Soaps --- Disinfectants --- Para Products

Ask for Samples

POLAK'S FRUTAL WORKS, Inc.

350 WEST 31ST STREET

NEW YORK CITY

Chicago Office—16 South Peoria St.

Say you saw it in SOAP!

VEGETABLE OIL
Cleansing
and
Scrubbing
SOAPS
 For General Use

HOTELS

HOUSEHOLDS

RESTAURANTS

RAILROADS

OFFICE BUILDINGS

STEAMSHIPS

SOFT POTASH

No. 1-P LIGHT **No. 2-P** DARK
 AMBER AMBER
40% Anhydrous

CONCENTRATED LIQUID

Pine Scrub

20% Anhydrous

These soaps can be used with perfect safety
 on any composition, material or surface that
 will stand clear water.

**TWO BEST SELLERS
 FOR JOBBERS**

*Prices Are Right—Send for Samples***KRANICH SOAP CO.**

54 Richards St. Brooklyn, N. Y.

Over 10 Years Makers to the Trade

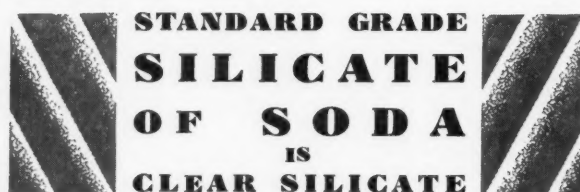
**A Safe Standard
 to adopt**

*... and mere sufficiency is not enough!
 Principles . . processes . . products . .
 and Silicates . . to earn their way to
 universal favor, and to standard prac-
 tice . . require the edge on competition
 . . they must excel!*

Just so . .

**STANDARD GRADE
 SILICATE OF SODA**

has given that *extra* measure of result-
 ful service, establishing it as the Soap-
 makers' ideal of composition, clarity
 and uniformity.



**Standard
 Silicate Company**

CINCINNATI · OHIO

OFFICE: 414 Frick Building, Pittsburgh, Pa.

FACTORIES:

Cincinnati, O. Lockport, N. Y. Marseilles, Ill.

Jersey City, N. J.

4
 Factories
 4
 Better Service

Say you saw it in SOAP!

Reduce Your Costs*(From Page 27)*

simply comparing stock on hand with average sales it is possible to determine just how much to make, and the time statistics will dictate when to make it. By comparing the quantity of packaging materials needed for the amount of product scheduled with the stocks on hand and the delivery time, it is possible to purchase intelligently. In this manner, it is easy to keep inventories at a minimum and thus release excess working capital for other uses. It should be borne in mind that the efficiency of a plant and, hence, its costs, are controlled, not by the mere possession of efficient, up-to-date equipment, but by the care given to the planning and routing of production. The schedule is the brain of the plant.

The fifth step requires careful attention to the packages themselves with a view to obtaining packaging materials at a lower cost without impairing appearance. The package should handle easily and without hand work during production. This is true even when a plant is still operating on a small scale. An ideal machine package is also an ideal hand package, and, in any case, provision should always be made for the future. If several different products are being turned out, as for instance a packaged liquid soap and a liquid furniture polish, it is possible to reduce

costs by using the same container for both. This permits the placement of larger contracts for bottles, cans, and closures. This procedure, moreover, eliminates an extra machine set up. When such a plan is adopted all labels for the different products should, of course, be the same size.

The sixth step is a personal one and depends upon the manager of the plant. Routine, much of it unessential, takes up so much of the average plant manager's time that he can devote but little of it to *consistent* cost reduction. He should study his own personal routine with a view to delegating as much as possible of it to clerks. This will leave him a larger amount of time to devote to the study of means to reduce costs. Cost reduction is second only in importance to the actual management of the plant. The plant manager should study trade papers, equipment literature, attend conventions and swap ideas with other plant men in his own field. The reduction of costs is a never ending job. The low sales price of many insecticides, polishes, most liquid soaps, shampoos, disinfectants and kindred products makes it imperative that the plant manager be constantly alert to apply every idea that will save even a small fraction of a cent per item.

—o—

United States exported 5,780,565 pounds of soda ash in July, 1931, receiving a price of \$88,783.

Established 1898

We recommend the following proven specialties for perfuming soaps, shampoos, etc.

	Per lb.
LAVENDER BOUQUET S. F.	\$4.00
NARCISSUS S. F.	5.00
NEW MOWN HAY S. F.	3.75
PINE BOUQUET F.	2.00
MOSS ROSE	4.00

These oils will perfume your product attractively and at low cost. Ask for new price list.

EVERGREEN CHEMICAL CO., INC.

160 FIFTH AVENUE

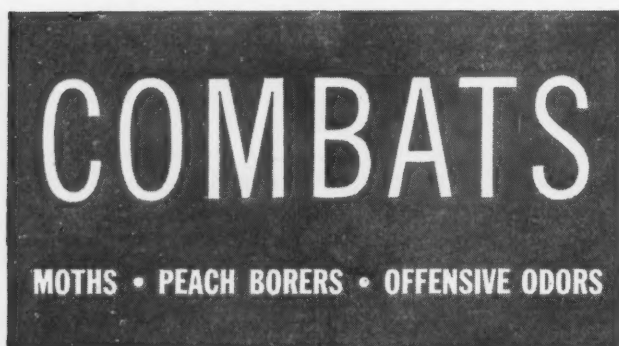
NEW YORK

Say you saw it in SOAP!

DOLLARS FOR YOU

in du Pont

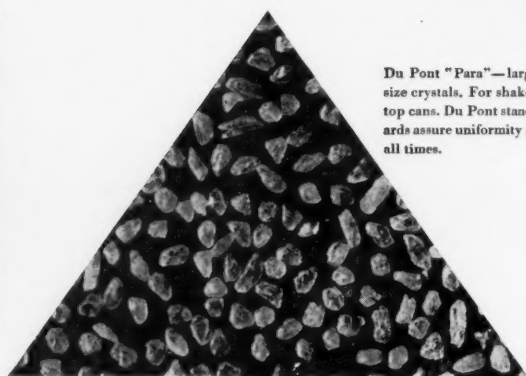
PARA-DICHLOROBENZENE



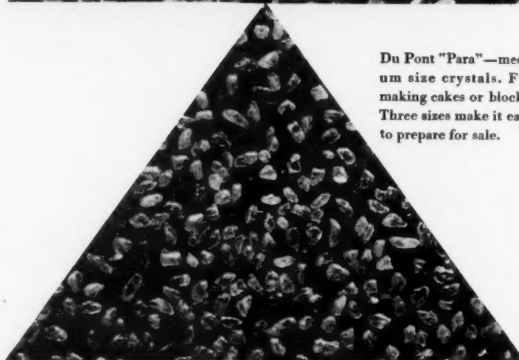
A New Standard of Quality

THERE is a ready market for a moth destroyer that will not injure fabrics, is easy to use, has a pleasant, anti-septic odor, and does not linger in fabrics after they are exposed to the air . . . for an effective control against the peach and apple tree borer . . . for a deodorizer that will neutralize offensive odors in the lavatory, garbage can and stench traps. Du Pont Para-Dichlorobenzene is just such a product. It establishes a new standard of quality. Safe and efficient. Being available in three sizes of uniform crystals, it is easy and economical to prepare for sale.

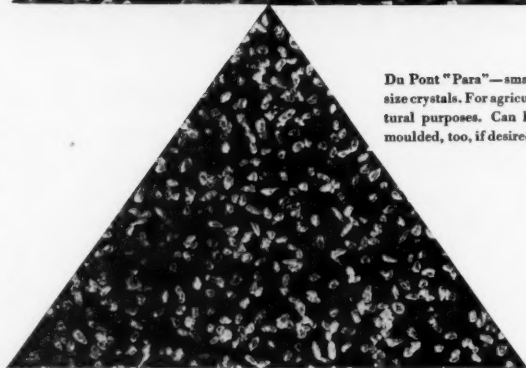
Du Pont Para-Dichlorobenzene can be used in shaker top cans, moulded into blocks or balls, and colored or perfumed to enhance its sales appeal. It is highly effective against certain orchard insects. There are many ways you can dress up these pure, fine quality crystals to make money. Its efficacy has been proved. It remains with you to package attractively and market Para-Dichlorobenzene. Here is your chance to enlarge your volume and make a greater profit. Start today by writing for samples and prices to E. I. du Pont de Nemours & Company, Wilmington, Delaware.



Du Pont "Para"—large size crystals. For shaker top cans. Du Pont standards assure uniformity at all times.



Du Pont "Para"—medium size crystals. For making cakes or blocks. Three sizes make it easy to prepare for sale.



Du Pont "Para"—small size crystals. For agricultural purposes. Can be moulded, too, if desired.



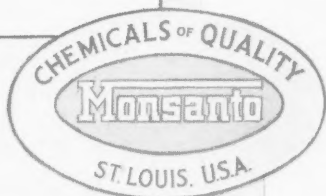
Organic Chemicals

E. I. DU PONT DE NEMOURS & COMPANY, INCORPORATED, WILMINGTON, DELAWARE

Say you saw it in SOAP!

INSECTICIDE ^{AND} DISINFECTANT SECTION

A Section of SOAP



A BACKGROUND OF 30 YEARS
OF MANUFACTURING

3
*uniform
sizes
of*
paradichlorobenzene

MADE to fit every need and every size and style of package, SANTOCHLOR (pure paradichlorobenzene of Monsanto manufacture) is given preference by the discriminating buyer. SANTOCHLOR crystals, made by an improved Monsanto process, are always white and uniform. Available as Santochlor No. 2, No. 34, and No. 5. Samples and prices will be gladly sent upon request.

Manufactured by

Monsanto Chemical Works
ST. LOUIS, U.S.A.

Empire State Bldg. NEW YORK Everett Station BOSTON 500 No. Dearborn CHICAGO 373 Brannan St. SAN FRANCISCO
Victoria Station House, Victoria St., LONDON, S. W. 1



BACKGROUND

It means far more than what is glibly called "good will."

Background means a fundamental intent to be fair, combined with a really complete understanding of the product—the practical phase as well as the theoretical.

PYRETHRUM PRODUCTS

At the outset of our specialization in Pyrethrum the marketing of Pyrethrum products was attended by the utmost confusion. To remove, if possible, most of this confusion by a straightforward presentation of the facts was our first aim. It is a matter of record that we fought this battle quite alone.

Pyrethrum can be made a very complicated subject yet obviously it is basically simple since Pyrethrum derives its whole value from its content of actual killing power value—a fact that we have stressed for a good many years.

The killing power value of POWCO BRAND Pyrethrum products is determined on the undeniably sound basis of actual tests on live insects which after all is what insecticides are supposed to do—kill insects.

There is no substitute for toxicity and that is precisely what POWCO BRAND Pyrethrum products and service guarantee to you.

"Killing power—that's the thing"

JOHN POWELL & CO., INC.

Specialists in Pyrethrum Products

114 E. 32nd St.

New York, N. Y.

Say you saw it in SOAP!

ELKO

Paradichlorbenzene Colorodors

For Deodorizing Crystals and Blocks.

Concentrated combined Perfume and Color Bases, especially prepared for perfuming and coloring paradichlorbenzene in one simple mixing operation. Elko Colorodors are absolutely soluble in paradichlorbenzene, thus assuring a finished product possessing uniformity of color and odor. On account of the superior strength of these Colorodors, half the quantity is required to produce desired results.

For Deodorant Crystals: One-fourth ounce of Elko Colorodor is simply mixed or stirred with one pound of paradichlorbenzene. To each pound of perfumed and colored crystals add $\frac{1}{8}$ ounce of Light Magnesium Carbonate and thoroughly mix with same. This addition will assist somewhat in preventing caking of the crystals in shaker cans.

For Deodorant Blocks: Melt your paradichlorbenzene and add the Colorodor in proportion of $\frac{1}{4}$ ounce to the pound of crystals. Same is then ready to pour into moulds.

Should you press your blocks, perfume and color your crystals as suggested above and they are immediately ready to press. In this case do not add the Magnesium Carbonate, which is suggested only for crystals when sold in that form.

Series P. D. 1

\$5.00 per pint.

Aroma des Fleurs (Blue)
Chypre (Green)
Eau de Cologne (Green)
Fleur de Mai (Yellow)

For high quality products.

French Bouquet (Green)
Jasmin (Yellow Golden)
Lily Valley (Light Green)
Narcisse (Yellow)

\$36.00 per gallon.

Orange Blossom (Orange)
Pine (Green)
Rose (Old Rose)
Violet (Violet)

Series P. D. 2

\$2.50 per pint.

Carnation (Pink)
Cedar-Pine (Yellow)
Eau de Cologne (Green)
Jasmin (Yellow Golden)

For popular priced products.

Lavender (Lavender)
Lilac (Lilac)
Narcisse (Yellow)
New Mown Hay (Yellow)
Orange Blossom (Orange)

\$18.00 per gallon.

Oriental (Green)
Pine (Green)
Rose (Old Rose)
Violet (Violet)

Series P. D. 3

\$1.50 per pint.

Carnation (Pink)
Cedar (Yellow)
Chypre (Green)
Citron (Yellow)
Cologne (Green)

For chain store products.

Jasmin (Golden)
Lavender (Lavender)
Lilac (Lilac)
Muguet (Green)
Narcisse (Yellow)

\$8.00 per gallon.

Orange Blossom (Orange)
Oriental (Green)
Pine (Green)
Rose (Old Rose)
Violet (Violet)

Samples Cheerfully Furnished

Address All Correspondence to Main Office and Laboratories

E. M. LANING COMPANY
INCORPORATED
IRVINGTON, NEW JERSEY



Phone
ESsex 2-8433

New York Office
130 Pearl Street

*Aromatic Chemicals, Essential Oils and Perfuming Specialties of
all kinds for Soaps, Disinfectants, Theatre Sprays, Fly Sprays, etc.*



Say you saw it in SOAP!

A
L
P
I
N
E

P
R
O
D
U
C
T
S

O
N
C
E

S
O
L
D

M
E
A
N

S
U
R
E

R
E
P
E
A
T

B
U
S
I
N
E
S
S

FULD'S WAX

Formerly Called NO-RUB

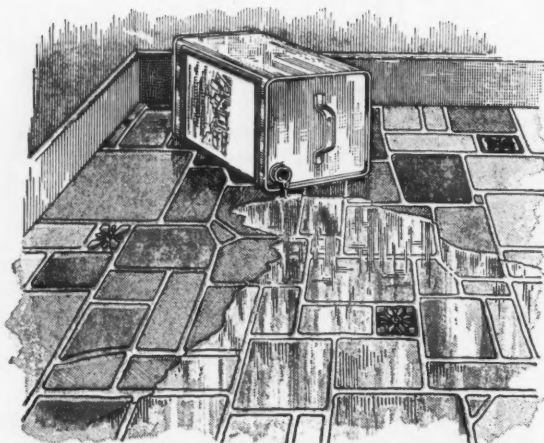
F ULD'S WAX
WEARS
BETTER

U NUSUAL
BRILLIANT
LUSTRE

L ESSENS
LABOR

D RIES
QUICKLY

S IMPLE
TO APPLY



F ULD'S WAX
WEARS
BETTER

U NUSUAL
BRILLIANT
LUSTRE

L ESSENS
LABOR

D RIES
QUICKLY

S IMPLE
TO APPLY

**A SELF POLISHING LIQUID WAX
EASY TO APPLY
PRODUCES A BRILLIANT, LASTING LUSTRE
WITHOUT RUBBING**

The only labor in waxing a floor with FULD'S WAX is applying it to the surface, merely wipe on floor. Dries ready for use with a brilliant, hard finish in 20 minutes.

For use on Linoleum, Composition, Rubber Tile, Hardwood, Painted or Varnished, Marble or Terrazzo Floors.

REQUIRES NO RUBBING OR POLISHING.

Non-Inflammable, Non-Explosive. Not Dangerously Slippery.

Keep in step with the march of progress

Add FULD'S WAX to your line.

Send for sample and convince yourself that

FULD'S WAX

is the greatest advance science has made to reduce floor
maintenance labor

Made Exclusively by

ALPINE CHEMICAL COMPANY

FULD BROS.

*Manufacturers of a Complete Line of Sanitary Chemicals for the
Jobbing Trade*

659 W. Pratt St.

BALTIMORE, MARYLAND

F
O
R

G
R
E
A
T
E
R

P
R
O
F
I
T

S
E
L
L

A
L
P
I
N
E

P
R
O
D
U
C
T
S

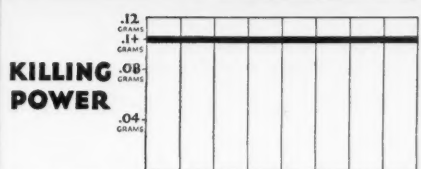
Say you saw it in SOAP!

20% more deadly

**Standardized Pyrethrin Content
in Pyrocide No. 20 INCREASED—
AT NO ADDITIONAL COST!**

KILLING POWER

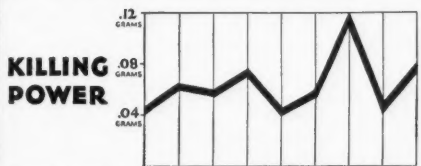
of Pyrocide No. 20 compared with
unstandardized Pyrethrum extracts



BATCH NO. 1 2 3 4 5 6 7 8 9

PYROCIDE No. 20

When you use Pyrocide No. 20 as the base for your fly spray or household insecticide, using one part Pyrocide in 20 parts light mineral oil, the pyrethrin content is stabilized at .1+ grams per 100 cc.—every batch the same—because the pyrethrin content of Pyrocide No. 20 is standardized.



BATCH NO. 1 2 3 4 5 6 7 8 9

NOT STANDARDIZED (Pyrethrin Content Fluctuates)

When you use pyrethrum concentrate made by direct extraction (and not standardized) the pyrethrin content of each batch of fly spray or household insecticide will vary, as widely as from .04 grams to .12 grams per 100 cc.

MILLIONS of gallons of finished insecticide were made from Pyrocide No. 20 in 1931. And there's one outstanding reason why the entire industry accepted Pyrocide No. 20 with such enthusiastic approval—*because*, it is the *only standardized* concentrated extract of pyrethrum flowers on the market. Pyrocide No. 20 is the *only* pyrethrum extract with a guaranteed absolutely stabilized pyrethrin content.

And now—due to new laboratories established in Japan, we can buy flowers of a higher pyrethrin content at the same price. So we have stepped up Pyrocide No. 20 to contain 20% more active principle—**AT NO ADDITIONAL COST TO YOU.** Pyrocide No. 20 is now guaranteed to contain 2.15 grams of

pyrethrins per 100 cc. Each gallon contains all of the active principle from 20 pounds of pyrethrum flowers having a pyrethrin content of .90% pyrethrins.

Don't be fooled by imitators of Pyrocide No. 20. Insist on standardization. *Watch the color.* Pyrocide No. 20 makes a yellow insecticide—the true color of proper direct extraction.

Pyrocide No. 20 is sold only to manufacturers of insecticides and is shipped in steel drums of 5, 10, 15, 30 and 53 gallons. Warehouse stocks are carried at New York, Los Angeles, Minneapolis and many foreign points. For your own percolation, we can also supply you with pyrethrum flowers with known pyrethrin content in whole, ground and powdered form.

McLAUGHLIN GORMLEY KING COMPANY
1715 Fifth Street SE., Minneapolis • Pyrethrum Specialists Since 1901

PYROCIDE No.20

STANDARDIZED EXTRACT OF PYRETHRUM FLOWERS

Say you saw it in SOAP!

paratints

for

BATH SALTS PARA BLOCKS

Series A \$2.00 lb.

Series B \$4.50 lb.

Eleven odor types
in each series

Givaudan-Delawanna, Inc.

80 FIFTH AVENUE, NEW YORK, N. Y.

Say you saw it in SOAP!

Baird's

Certified Coal-Tar Disinfectants

are known and used throughout the world because of their quality, dependability and efficiency. They are supplied only in concentrated form, dilute readily with water to form rich, milky emulsions, which do not separate on standing, and have a good clean odor of tar. Each batch is tested for germicidal strength.

Cresol Comp. U. S. P.

also known as Liquor Cresolis Compositus, U. S. P., is made in exact accordance with the specifications of the U. S. Pharmacopoeia. Phenol coefficient $2\frac{1}{2}$ to 3. Dilutes with water to form clear, amber-colored solutions. Largely used by the medical profession, hospitals and veterinarians.

Crestall Compound

is similar in composition, appearance and odor to Cresol Compound, U. S. P., but prepared from refined cresylic acid as a base. Approximately twice as strong as the U. S. P. product, and very effective in preventing the spread of animal diseases.

Mosquito Larvaecide

A coal-tar product employed for killing mosquito larvae. Effective in dilutions of 20,000 to 40,000 to one. Superior to petroleum oil, as it is not affected by rain-fall or wind and does not involve fire hazard.

Pes-Tox Insecticide

of the pyrethrum type, pleasantly scented. Quickly kills practically every type of crawling, flying and hopping insect. Light lemon color. Especially effective when used in the form of a spray.

Pine Oil Disinfectant

A fragrant pine product, made from pure steam-distilled pine oil according to the formula of the Hygienic Laboratory of the U. S. Public Health Service. Mixes freely with water to form good milk emulsions, with pleasant pine odor. Free from mineral oil or other adulteration.

BAIRD & MCGUIRE, INC.

Holbrook, Mass.

St. Louis, Mo.

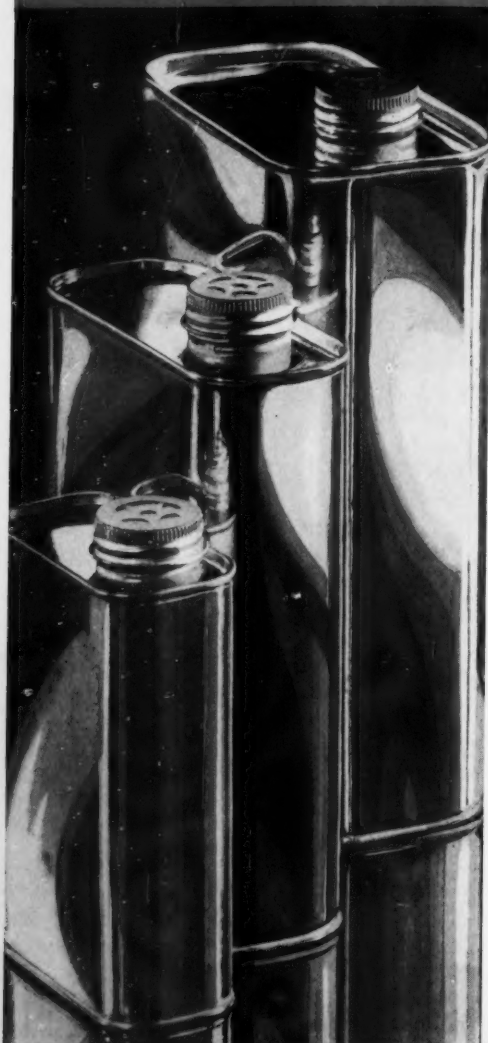


New York City and New Jersey Representatives:

Eastern States Supply Company, 136 Liberty St., New York City
Telephone WOrth 2-3143.

Say you saw it in SOAP!

CONTAINERS...



SIZED BY SERIES... To Meet the Consumer's Exact Quantity Demands

... and consumers of liquid products often demand a specific quantity... otherwise they refuse to be sold.

CANS... in serial sizes solve this matter of preference... make sales easier!

Perfect samples of Can-making... designed for practical and display value... for economy of space on shelf and counter.

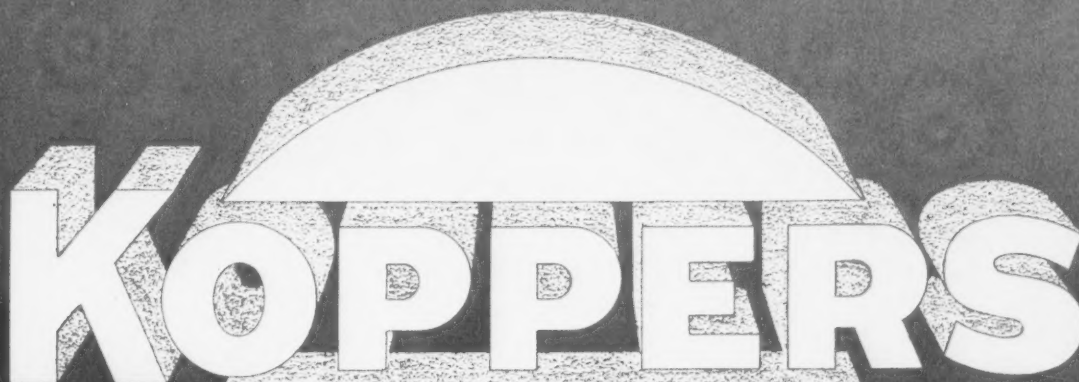
Made Plain, or with handsomely color-lithographed trademark designs and directions.

METAL PACKAGE CORPORATION

Sales and Executive Offices: 110 E. 42nd St. New York City

PLANTS: New York City • Baltimore • Brooklyn
THE FISCHER CAN COMPANY DIVISION
Hamilton, Ohio

Say you saw it in SOAP!



KOPPERS

COAL TAR DISINFECTANTS

With unexcelled facilities for producing our own raw materials and for compounding and testing them in our own plants and laboratories, we guarantee Dependable Disinfectants of both soluble and emulsifiable types. Our soluble disinfectants form clear, pale solutions and our emulsifiable ones form rich, milky solutions, free from deposit when diluted with water. Our Frozen Tar Acid Oils (10% to 40% strength), properly compounded, yield white-emulsion disinfectants free from naphthalene deposits. Samples, prices and full information furnished gladly on request.

These products can be bought by the can or car-load... put up as your own brand... or shipped in bulk.



DISINFECTANTS

COAL TAR DISINFECTANT
(Coefficients 2-20)

TAR ACID OILS

CRESOL COMPOUNDS
(Liquor Cresolis Compositus U.S.P.
Cresol Compound Technical)

ANIMAL DIPS

CATTLE SPRAYS

CRESOL U. S. P.

CRESYLIC ACID

LIGHT OIL DISTILLATES
(Benzol, Toluol, Xylol,
Solvent Naphtha)

WOOD PRESERVATIVES

AGRICULTURAL
CHEMICALS
(Ammonium Sulphate
Flotation Sulphurs)

NAPHTHALENE
(Crude and Refined... All Kinds
... Moth Balls ... Flakes)

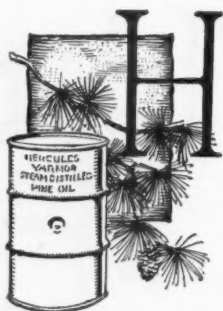
KOPPERS PRODUCTS COMPANY
CHICAGO PITTSBURGH PROVIDENCE

THE WHITE TAR COMPANY
KEARNY, N. J.

A Subsidiary of The Koppers Company

Say you saw it in SOAP!

YARMOR — A product that serves many industries



HERCULES Yarmor Pine Oil, when properly compounded, produces a series of products valuable to many manufacturers.

Yarmor's fragrant, piney odor and germicidal action have established it as a major ingredient in deodorants and disinfectants. Its repellent action towards flies and other insects has standardized it among disinfectant manufacturers who sell to farmers and dairymen.



The pronounced detergent properties of Yarmor have interested the liquid and semi-paste scrubbing soap and laundry soap manufacturers.

Yarmor's emulsifying and preserving properties have met with the approval of metal and furniture polish manufacturers.



We want to discuss these developments with manufacturers in these fields.

NAVAL STORES DEPARTMENT

HERCULES POWDER COMPANY
INCORPORATED

961 Market Street, Wilmington, Delaware

Branch Offices: Chicago . New York . St. Louis . Salt Lake City . San Francisco
Largest producer of pine oil, wood rosin, and steam-distilled wood turpentine



HERCULES POWDER COMPANY, 961 Market Street, Wilmington, Delaware
Please send me a copy of your booklet, *The Efficiency of Hercules Yarmor Pine Oil in Disinfectants and Insecticides.*

Name..... Company.....
Street..... City..... State..... QQ-9

Say you saw it in SOAP!

Naphthalene Perfumes

Colorome Naphth
Series "250"

—YOSOY—

Green

●

THROUGH a series of tests conducted in our laboratories we have developed three new sets of **COLOROMES** which are specially designed for perfuming and coloring **NAPHTHALENE** in one single operation. Coloromes can also be had without color.

Ask for complete list.

FELTON CHEMICAL CO.

599 Johnson Ave.

Brooklyn, N. Y.

Say you saw it in SOAP!

van Ameringen-

Whatever Helps a Little, Helps a Lot

Are you making a product that ought to be perfumed, or that would sell better if it were?

Does your product have an unpleasant odor that nourishes sales resistance?

These are not *out-of-the-ordinary* conditions. We meet them daily.

If you have a problem in which perfuming may help, consult us. Even if you haven't thought of it as a problem, show us your product and let us see if we can improve matters.

Perhaps our effort will point the way to increased sales. These are times when anything that helps at all, helps a lot.

In this sort of work, there is no obligation either way. We ask nothing of you but a willingness to buy our perfume materials if they do a good job at a fair cost.

We are not always successful, but our average of successes is pretty high. We do not hesitate to tell you the truth about what our products can or cannot do for you.

—if we have the opportunity.

—and that's up to you.

van Ameringen-Haebler, Inc.

Aromatic Essentials

315 Fourth Avenue, New York

180 No. Wacker Drive, Chicago

619 Clark Avenue, St. Louis

42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

Say you saw it in SOAP!

Haebler, Inc.

Better Odors Often Make Better Sales

van Ameringen-Haebler, Inc., is an organization of about sixty people. We maintain several offices, and a factory. We import and manufacture perfume materials for use in

Soap	Disinfectants
Shampoos	Insecticides
Liquid Soap	Fungicides
Perfume	Paint
Face Powder	Urinal Blocks
Cosmetics	Moth Repellants
Hand Soap	Metal Polish
Soap Powder	Leather
Ink	Fabrics
Paste	Hair Preparations
Ointments	Antiseptics

and many other materials

We invite a frank statement of the conditions which our odors are expected to overcome. If possible send us a sample of your product *unperfumed*. We will be glad to work on it and return our suggestions and quotations.

van Ameringen-Haebler, Inc.

Aromatic Essentials

315 Fourth Avenue, New York

180 No. Wacker Drive, Chicago

619 Clark Avenue, St. Louis

42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

Say you saw it in SOAP!



Certified Disinfectants

of coal-tar are so named because every lot is tested and certified to by independent analysts, thus insuring to the buyer a guarantee of quality and strength. A copy of the bacteriological certificate will be furnished whenever requested.

The name BAIRD'S on a container of disinfectant means not only that it is a certified product, but one which represents over a quarter of a century of manufacturing experience and technical skill . . . insuring uniformity of composition . . . uniformity of quality . . . uniformity of result. BAIRD'S Certified Disinfectants dilute readily with water to form rich, milky emulsions.

Whether your disinfectant requirements are large or small, or whether the coefficient is two or twenty or any intermediate strength, let us figure with you. Samples will be submitted for your inspection, and we will be glad to give you the benefit of our many years of experience as specialists in this line.

Cresylic Acid

Animal Dips

Household Insecticides

Made Right—Priced Right

BAIRD & MCGUIRE, INC.

Manufacturers of



Certified Disinfectants
and Quality Sanitary Products

HOLBROOK, MASS.



ST. LOUIS, MO.

New York Representatives

THE EASTERN STATES SUPPLY COMPANY
136 Liberty Street Phone: WOrth 2-3143

Warehouse stocks at convenient points throughout the country.

Say you saw it in SOAP!



INSECTICIDE AND DISINFECTANT SECTION



A Department of SOAP

SOAP is official publication of *The Insecticide and Disinfectant Manufacturers Association*.
Harry W. Cole, Holbrook, Mass., Secretary.

Advance Selling

PUTTING out salesmen to sell the retail dealer six and eight months in advance of the actual consuming season appears to us to be stretching out the selling season unduly. Some insecticide manufacturers book business for delivery the following spring as early as September first. Of course, if the idea was to stimulate the all year around use of insecticides, it might be a different story, but practically all of the insecticide selling is for spring delivery. The object of early selling is no secret,—to beat the other fellow to it. The start of the sales campaign has gradually crept back nearer and nearer to the previous season. The establishment of a “dead line” would not be at all a bad idea, and this should be set preferably about December first, and most certainly no further back than November first.

Disinfectant Tests

THAT germ life does not occur in a state free from albuminous and other organic matter is unfortunate from the angle of practical germicidal value as compared with the phenol coefficient by any of the recognized tests. The fact remains, however, that organic matter in the form of urine, pus, blood, and the like are the media in which the organisms live, and it is against germ life in this form that the action of disinfectants must be judged in practical usage. Because most of the ordinary disinfectants coagulate albuminous

matter or react with the media in some way which tends to inhibit the activity of the disinfectant by occlusion of the organisms, the ordinary phenol coefficient test means but little in practical use. Conditions under which the disinfectants are used seem to be the all-important factors.

Much has been written about the use of *B. Typhosus* as the standard test organism. It has been pointed out on numerous occasions that there is in reality little comparable connection between the ability of a disinfectant to kill *B. Typhosus* and some other organism. Some disinfectant manufacturers have taken cognizance of this to the extent of testing their products regularly against all the common organisms, which tests incidentally, have been known to show a wide variation.

The *English Pharmaceutical Journal* stated recently that the Rideal-Walker method of testing disinfectants is the only one which has stood the test of time and that to devise a test for general use in which organic materials are employed to approximate natural conditions, is an impossibility. They may be correct, but we still believe that there is much to be desired in any chemical or bacteriological test or tests which hit as far from the mark as do the present methods when we consider the practical application of the products.

Judging from the number of new trade marks for insecticides which have been
(Turn to Page 115)

The Insecticide and Disinfectant Manufacturers Association

OFFICERS

President.....Dr. Robert C. White
Robert C. White Co., Philadelphia
1st Vice-President.....Evans E. A. Stone
William Peterman, Inc., New York
2nd Vice-President.....Peter Dougan
Merck & Co., Rahway, N. J.
Treasurer.....John Powell
John Powell & Co., New York
Secretary.....Harry W. Cole
Baird & McGuire, Holbrook, Mass.

Board of Governors

W. J. Andree.....Sinclair Refining Co., New York
C. C. Baird.....Baird & McGuire, Holbrook, Mass.
S. H. Bell.....American Tar Products Co., Pittsburgh
J. L. Brenn.....Huntington Laboratories, Huntington, Ind.
F. A. Hoyt.....Frederick Disinfectant Co., Atlanta
H. W. Hamilton.....Koppers Products Co., Pittsburgh
M. M. Marcuse.....West Disinfecting Co., New York
C. P. McCormick.....McCormick & Co., Baltimore
Dr. C. H. Peet.....Rohm & Haas Co., Philadelphia
W. J. Zick.....Stanco, Inc., New York

Membership

Active—Open to manufacturers and wholesale distributors of disinfectants, germicides, deodorants, insecticides, liquid soaps, polishes, and allied products. Dues—\$75.00 per year.

Associate—Open to firms supplying raw materials, containers, equipment, etc., to the membership. Dues—\$50.00 per year.

For further details, communicate with

**INSECTICIDE & DISINFECTANT
MANUFACTURERS ASSOCIATION**

Harry W. Cole, Secretary

HOLBROOK

MASS.

Notes of the Trade

Leslie Hart, who has been in charge of the Central District Insecticide and Fungicide Laboratory of the Food & Drug Administration at Chicago for the past four years, has resigned to enter the Food Control Office of the Food & Drug Administration in Washington, D. C. Mr. Hart is well-known among the members of the Insecticide & Disinfectant Manufacturers Association.

Willoughby M. McCormick, head of McCormick & Co., has addressed a letter to President Hoover in which he enumerates several practical suggestions for the relief of unemployment. He suggests reforestation, work on watersheds, progress on the Nicaraguan Canal and an extensive program of public works.

Sales of Lehn & Fink for the first eight months of 1931 were less than 9 per cent below those in the corresponding period of 1930, according to the statement of Edward Plaut, president of the company.

Samuel H. Bell of the Koppers Products Co., Pittsburgh, Lieutenant-Colonel in the Remount Service of the Q. M. Reserve of the U. S. Army, is spending two weeks in active service at the Remount Depot at Front Royal, Va., Oct. 14-28. During the war Col. Bell spent two years with the Remount Service in France.

Arthur Ponder, assistant general manager of the Dominion Tar & Chemical Co., Montreal, Canada, and widely known in the American disinfectant industry, is the father of another child born recently, the sex, age, habits, etc. of which have not been announced to us as yet by Mr. Ponder.

Monsanto Chemical Works, St. Louis, has moved its New York offices to the Empire State building. New telephone numbers are Pennsylvania 6-7680 to 7685.

The fall radio program, sponsored by McCormick and Company, features a return engagement of the former Metropolitan prima donna, Mabel Garrison, accompanied by The McCormick Symphony. Well-known classical numbers and songs will compose the programs in this series. The concerts will be given over station WBAL every Tuesday evening from 8:30 to 9 P.M.

Say you saw it in SOAP!



A Field of Pyrethrum Flowers in Full Bloom.

PYRETHRUM

1917-1931

By JOHN POWELL

John Powell & Co., New York

PYRETHRUM today is a vastly different product than it was fifteen years ago. American consumption has increased five fold since 1917 and with the increase have come new standards of quality, grades, and effectiveness. Looking back fifteen years carries us to 1917 when the chief use of pyrethrum was in the finely powdered form. There were few pyrethrum liquid insecticides on the market at that time of the modern "fly spray" type, and those which were made were sold mostly in localized territories in the South. It is interesting to note, however, that there was published literature covering the use of pyrethrum in liquid spray insecticides as far back as 1898. This fact presents a strange commentary on the practical use of scientific data. While these important facts regarding insecticides were in evidence for a number of years, they were not utilized commercially until the last decade.

Although the greatest expansion in the use of pyrethrum has come in the past ten years, the flower has been used for over a century for killing insects. The first insect powder originated

in Asia Minor and was called "guirila." This powder came to be known as Persian insect powder and undoubtedly was ground from the *Roseum* species of the pyrethrum family. In about 1800, the peasants of Dalmatia then a part of Austria-Hungary, discovered that the *Cinerarifolium* species had active insect killing properties. Basing their powder on this species of the flower, the Dalmatian merchants gradually took over most of the business from their Eastern competitors until the production of Persian insect powder dwindled to extremely small amounts. Although the name Persian insect powder still persists in some quarters of the world, no Persian powder of any consequence has been produced for years.

As early as 1818, Russia was said to be consuming as much as 200,000 pounds of insect powder a year, but the source of the powder was kept a secret for many years because the people who gathered and powdered the flower heads were afraid that their business in the "magic powder" would be stolen away. It remained, it appears, for an Armenian merchant named Sumttoff while on a business trip to discover that insect powder

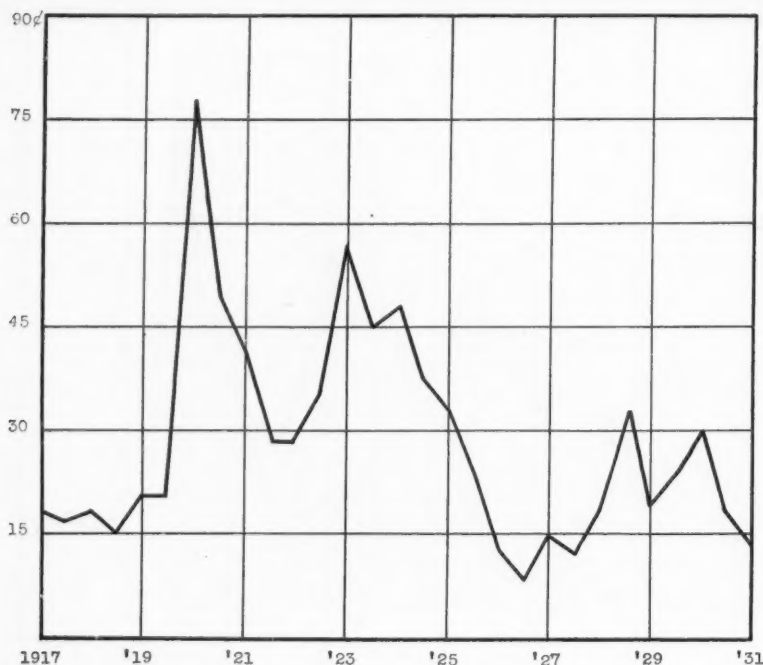


Chart showing the price of pyrethrum flowers in cents per pound in Japan over the past fifteen years. During the period of these fluctuations, the American consumption of pyrethrum increased approximately from two million to ten million pounds per year, most of the increased imports into this country originating in Japan

was being made from pyrethrum flowers, and early in the nineteenth century, his son began the manufacture of the powder on a large scale. It was at this time and from this factory that the first large shipments of the powder were made to the countries in Western Europe. It is reported that the first shipment of insect powder to the United States was in 1855 and that the early demand for it was very modest. From that time, the expansion in its use was more or less gradual until 1920. From then until the present, consumption has grown rapidly owing chiefly to the commercial advent of the liquid pyrethrum insecticide.

The pyrethrum of Dalmatia or *crysanthemum cinerarifolium* is a white flower when in bloom similar to the common American daisy. The type originally used in Asia Minor or the *crysanthemum roseum* is a much more beautiful flower in bloom, red being the predominant color. After they are dried, they are readily distinguishable from the *cinerarifolium* type by their darker coloring. Pyrethrum flowers have always been picked by hand. No machinery has ever been developed to harvest them successfully. Today, in both Dalmatia and Japan, they are cultivated just the same as any other crop. The peasants are the mainstays of the industry, and whereas, the menfolk sometimes assist in the work, the crop is picked chiefly by the women and children.

From the time of planting, it requires two years for the plants to bloom, and they bloom for five seasons, after which new plants have to be put down. An expert picker can gather about

fifty pounds of flowers a day. When picked, they are spread out and dried in the shade. The stage of development of the flower when picked determines whether they are closed, half-closed, or open when dried. The small Dalmatian farmer disposes of his flowers at the local store or trading center and gets in exchange clothing, food, etc. In this way, small collections pass to the trade centers where they are graded and baled. The nature of the soil, care in harvesting, freedom from stems, sand, etc., care in drying, all are important factors.

PRIOR to the World War, and for a short period directly following its close, Dalmatia was the principal exporter of pyrethrum to the American market. During the war, Dalmatian production of pyrethrum was seriously interfered with by hostilities, and Japan was the only source of supply open to the Allied Nations. The demand, however, did not compare with the quantities required by insecticides manufacturers today. Some buyers of pyrethrum are still under the impression that Japanese flowers are generally inferior to those grown in Dalmatia, but experience and investigation have shown that this belief has no basis in fact. It must also be remembered that exactly the same species of flowers (*Chrysanthemum Cinerarifolium*) are grown in Japan as in Dalmatia, the only difference being in general methods of harvesting, drying, and packing. The first flowers planted in Japan were from Dalmatian seed.

Previous to the war Dalmatia was the principal exporter to this market, but before 1923, Japanese importations had reached the ascendancy which they have held ever since. Importations of Pyrethrum Flowers into the American market from 1918 are shown below:

Year	Pounds	Value
1918	2,298,476	\$428,751
1919	3,399,026	667,274
1920	6,827,700	2,672,576
1921	3,958,657	1,749,213
1922	2,600,093	789,988
1923	3,962,222	1,742,108
1924	2,950,269	1,316,503
1925	3,812,093	1,022,043
1926	8,945,124	1,344,645
1927	10,472,479	1,271,335
1928	11,377,445	2,425,171
1929	9,502,461	2,775,826
1930	9,369,516	1,771,569

It will be observed that with the exception of 1920, when pyrethrum reached its all-time peak in prices, the importations remain more or less on a parity until 1926 when there was almost a 300 per cent increase. From then on to the present, pyrethrum hit its stride, and except for reasonable fluctuations has maintained it since. Imports of Dalmatian pyrethrum flowers have declined to small proportions, but there is some indication that Dalmatia intends to make a more strenuous effort for a larger share of the world market, as shown by a recent announcement that more up-to-date methods of marketing are to be adopted, together with a more definite standard of grades.

FIFTEEN years ago, there were just three grades of Dalmatian flowers, namely,—open flowers, half-open flowers, and closed flowers. In Japan there was only one composite grade sold in this market as f.a.q., meaning "fair average quality." The deeper meaning of f.a.q. is that flowers offered under that designation are supposed to represent the fair average quality of the crop in any given year or the average quality of the remainder of the crop. Actually, as many as five different grades of flowers may be used to make up this so-called fair average quality, not to mention the generous admixture of previous crop flowers. The difficulties involved in proving whether or not a given lot of Japanese flowers really do represent the average of the crop are obviously very great.

While Japan has rigidly adhered to this method of marketing its flowers, each new year has brought out one or more different grades of Dalmatian flowers. While, as previously stated, Dalmatia formerly offered only three different grades, she now offers several different grades of closed flowers alone, together with a wide variety

of new mixtures of flowers, until all told there are some twelve distinct grades regularly marketed. It was always possible to buy different qualities of closed flowers, mostly on a basis of appearance, a premium being demanded for choice looking lots.

A great deal of confusion has naturally resulted from such a condition, and the decision of Dalmatian growers to get together on one standard grade unquestionably will be welcomed by the trade. This might help insecticide manufacturers in one way, but in my opinion, it will always be possible to secure off quality or off color grades in Europe or Japan.

The use of the designation "Dalmatian Flowers" is to describe flowers coming largely from the old Austro-Hungarian Empire, which has since the war been cut up into a number of smaller countries. Trieste has, for a number of years, been the chief exporting point for these flowers which are grown in Jugo-Slavia and other nearby states. Kobe remains the chief shipping and trading center for Japanese flowers.

IN any consideration of pyrethrum flowers, it is interesting to note how much in the way of false assumption has grown up respecting their use and sale. Prior to 1923, comparatively little practical research had been conducted. Certain facts were assumed to be true without taking the trouble to investigate. If some idea regarding pyrethrum appeared to be logical, it was accepted, although no definite certainty existed as to whether such assumption was correct or not.

An instance of this happened in the early experience of the writer, which will clarify the point. Since, as we have previously pointed out, closed flowers were always (without any definite knowledge to the contrary) considered to be of the best quality, a notion had grown up that if the flowers were closed, there could be no question about their killing power. It was assumed that nature made every single closed flower high in toxicity. In this connection, we well remember a very beautiful lot of closed flowers that proved to have scarcely any killing power whatever. Here indeed was a discovery—here all illusion was shattered. This created a situation where the importance of a full investigation of both the practical and scientific aspects of pyrethrum was distinctly indicated. Previous to that time, importers of pyrethrum had blindly assumed that nature could do no wrong, and as long as they did not take the trouble to find out differently, theirs was a profitable ignorance.

Even today, quantities of pyrethrum are imported, ground, and sold, without the slightest knowledge of its actual toxicity. This seems indeed strange when it is quite obvious that the only

(Turn to Page 115)

Perfumes For

PARADICHLORBENZENE

Individual odors to meet every fancy. . . . At prices which will appeal to the buyer who is anxious to keep his production costs low . . . and still supply well perfumed deodorant crystals and blocks.

The following have proven extremely popular:

	Lb.		Lb.
American Thistle No. 1010.	\$2.25	Rose No. 310	\$2.50
American Thistle No. 180.	5.00	Rose Heavy No. 99 . . .	5.00
Forest Bouquet No. 42 . . .	4.00	Trefle No. 619	2.85
Carnation No. 50	5.00	Trefle No. 157	6.00
New Mown Hay No. 319.	2.75	Violet No. 611	3.10
New Mown Hay No. 75 . .	5.00	Wild Flower No. 5300.	1.75
Oriental No. 88	5.00	Wild Flower No. 113 . .	5.00

In addition to the odors listed we also have many others ranging in price from \$1.25 to \$8.00 lb.

Guaranteed not to decompose or change in odor, no matter how long they remain in contact with the chemical.

All of our Paradichlorbenzene odors are supplied with or without color.

Used one pound to one hundred pounds of crystals.



P. R. DREYER INC.

26 Cliff Street

New York

"Its the Odor that Sells the Product"

Say you saw it in SOAP!



The demonstration truck of the Sinclair Refining Company which travels about the country with full insecticide testing equipment, including death chamber and fly breeding cages

Demonstrating The Modern Insecticide

The Equipment of Sinclair Refining Which Is Moved About the Country by Truck to Demonstrate Its Product

SEEING is believing—this is the motto in the sale of liquid insecticides by the Sinclair Refining Company of New York. In order that prospective buyers may see the manner in which their insecticide kills insects, they demonstrate the product in various parts of the country by use of a portable insecticide testing outfit. The equipment is carried from city to city, and where need be, from buyer to buyer, in a small truck especially designed for the purpose. The truck is equipped with complete fly breeding jars and cages. It carries a four foot cube glass death chamber, loud speaking equipment, stocks of insecticide, advertising literature, and other accessories, not to mention a supply of food for the flies and other insects. Some times, the equipment is set up in a store window as part of a display of P-D, the Sinclair product, for demonstrations at regular intervals to passing shoppers. Some times, the equipment is used to show large industrial consumers of bulk liquid insecticide the killing power of the product which the company is offering.

The portable demonstration equipment and truck have been in use by Sinclair for more than a year past, and during that time, the equipment has been used in 35 states and shown before thousands of people. Not only is it operated to interest buyers in the product, but has been used before group meetings of more than a thousand

salesmen of the company to educate them in the properties and demonstrate the possibilities of the insecticide which they sell. The truck is equipped with a hot water heating system which enables the company to use it all year around, covering the South in the winter months. With the heating unit keeping up the temperature when needed, cultures are kept alive, and cages of hatched-out flies are kept in good condition for demonstrating. Combined with demonstrations to group sales meetings in all parts of the country, and with department store demonstrations, the equipment has been used at state and county fairs, food shows, etc. The photograph herewith shows the equipment set up in the window of the Lamson Department Store in Toledo. The radio microphone is used by the demonstrator to explain to those looking in at the window that the tests which he is showing them are the same as those used in the factory to make certain that the maximum killing power of the insecticide is being secured.

Discussing the use of insectary bred flies for insecticide testing, the company maintains that they are a more difficult test of an insecticide than cockroaches, bees, wasps, hornets, yellow jackets, etc. The five-day old laboratory-bred house fly is held to be the most resistant household insect to the toxic effects of the regular spray. The insectary fly is also held to be far nearer a standard



Insecticides

that *Sell* consistently

because they *Kill* consistently



As Hopkins' Insect Flowers are gathered, milled and tested, they bring to every package of your finished product the UNIFORM run of HIGH KILLING POWER that builds up your sales and keeps them growing

HOPKINS'

(Oven Dried)

Analyzed RED-RAT-SQUILL

Physiologically Tested

We are prepared to supply red squill of a toxic quality which consistently surpasses the fatal-dose standard commonly accepted. Laboratory tested, Hopkins' red squill assures the maximum of uniformity.

As the poison SPECIFIC TO RATS AND MICE, red squill is absolutely harmless to human beings or domestic animals.

Sold in bulk. Quotations and descriptive folder gladly sent.

HOPKINS' Analyzed PYRETHRUM

(Extract or powder)

Made Exclusively from the CLOSED DALMATIAN
PYRETHRUM FLOWERS



Open or half-open insect flowers necessarily lose part of their active principles through the action of the elements.

To assure yourself of pyrethrum with the highest, consistent run of killing activity, specify HOPKINS' PYRETHRUM PRODUCTS. They are made, unvaryingly, from the highest-testing Dalmatian Flowers only.

We are in position to give you interesting quotations, either for contract or immediate delivery.

Ask for our Pyrethrum folder

We Are Glad to Quote on:

DERRIS ROOT

One of the most powerful insect killers yet discovered. Deadly to insects both through the stomach and as a contact insecticide.

J. L. HOPKINS & CO. INCORPORATED

*Importers, Millers and Distributors of Analyzed
and Standardized Crude Drugs*

135 William St.

New York

Say you saw it in SOAP!

Window demonstrations in prominent stores are staged at regular intervals to illustrate the killing power of the insecticide. The results in the death chamber tell their own story to the prospective purchaser



than other insects and as such, represent a more closely standardized test for any insecticide.

THE demonstration truck of the Sinclair company and its equipment are an offshoot of the most complete entomological laboratories among the insecticide manufacturers of the country. The Sinclair main laboratory is located at the plant in East Chicago, Ind. It is conducted by A. G. Grady, chief entomologist for the company. The chemical work of the insecticide laboratory and control of the manufacture of the product is in the hands of N. G. Gothard. Mr. Grady is co-author of the Peet-Grady Method of insecticide testing, with Dr. Charles Peet of the Rohm & Haas Co., Philadelphia.

Although most of the testing at the Sinclair laboratory is done against the common house fly, roaches, bed bugs, mosquitoes, and other insects are also bred. In this connection, it is interesting to note that the company bought bed bugs from certain quarters at a cost of twenty-five cents per bug in order to get their own strain under way. As bed bugs require blood for food, shaved guinea pigs are being used for the purpose. The fly, however, is reared in large numbers and is considered the most suitable testing insect because of his sturdiness, his commonness as a pest, and the ease with which he can be reared. The insectary is kept constantly at 80 deg. F. and at 50% relative humidity.

The death chamber in the main laboratory is a standard 6 x 6 x 6 room with glass observation windows and walls made of transite board covered inside with a special sodium silicate-zinc oxide paint which does not absorb any appreciable

amount of the petroleum base of the insecticide. The chamber is equipped with exhaust blower to remove all traces of the insecticide after a test has been run. A test batch of flies is 100, which are transferred to the Chamber in a wide mouth bottle, and after they are all in, a definite amount of insecticide is injected with an atomizer at a regulated pressure. In some testing methods of other laboratories, the liquid is sprayed into the chamber before the flies are put in. After ten minutes, the "downs" are taken out and provided with food and water for twenty hours, and then counted for "deads."

The specialty division of the Sinclair Refining Company which has among other things, charge of the production and marketing of insecticides, is headed by W. J. Andree, assisted by D. M. Hills. Both of these men operate from the main office of the company in New York.

Whole or powdered pyrethrum flowers are said to retain their insecticidal activity for considerable periods if stored in closed vessels at ordinary temperatures. When exposed to the air in thin layers or as finely ground powder, loss of toxicity may occur. Alcoholic and petroleum extracts of pyrethrum retain their toxicity in temperate climates for many months. Experiments have shown that the permanence of the pyrethrins in alcoholic extracts, in water-miscible petroleum extracts and in emulsions of these extracts in alkaline sprays of varying alkalinity is greater than is generally supposed. *Ann. Appl. Biol.* 18,203-43 (1931). *Chem. Abstr.* 25,4967 (1931).

Be it

- a food
- a drug
- a beauty
preparation
- or almost any
other item, for
that matter



*there is **PROFIT** in 10c sizes*

It is obviously ridiculous to say that every manufacturer or packer could profitably market a 10c line. But many of the fears and misgivings that formerly held them back have been exploded.

For instance, instead of these items having an adverse effect on the regular line, exactly the opposite has been the rule. The 10c items have proved a means of securing additional users, an effective sampling medium, have broadened the market—resulting in an actual increase in the demand for the regular, more economical, sizes.

Certainly there are factors and costs to be taken into account. 10c items are not “put across” automatically. It takes time and effort.

But first and foremost to be considered are the probable and possible benefits (listed to the left). These are proving important enough and profitable enough with a rapidly increasing number of products, to have thoroughly justified their introduction in 10c sizes.

We have prepared a folder discussing this question in detail. It not only takes up the advantages and benefits but points out some of the things to guard against. Just ask us to mail you a copy. And later on Anchor will be glad to work with you in developing an appropriate and sales effective 10c package.

Anchor Cap & Closure Corporation

Long Island City, N. Y.

Branches in all principal cities

Toronto, Canada

The principal benefits resulting from the introduction of 10c packages are:

1. The creation of a new market and new friends for the product
2. The appeal to a powerful consumer buying habit
3. New retail distribution outlets
4. An efficient method of sampling
5. A stimulant to sales of larger sizes
6. An outlet for surplus or slow moving stocks
7. Increased sales volume, reduction in overhead costs, added profits.

CONSUMER - APPROVED CLOSURES
Anchor for every Packing Need

Say you saw it in SOAP!

Mexico As A Market For Animal Dips

BY ROBERT FRAZER

Consul General, Mexico City

BECAUSE Mexico is a large cattle and sheep raising country, there is potentially a large demand for various types of animal dips from that republic. A census of the cattle and sheep populations of Mexico reveals that there are close to six million cattle and three million sheep. At the present time, only a fair demand exists in Mexico for prepared animal dips, but the future holds promising possibilities. As the people become more and more enlightened, and familiar with scientific and modern methods, realizing that neglect of their live stock detracts materially from the latter's market values, and as general interest is stimulated through the laudable efforts of the Mexican Department of Agriculture, an increased demand will concomitantly appear. The sheep and cattle industry in Mexico is by nature and tradition, one of its basic ones. The disturbed conditions of the Republic beginning with the revolution of 1910, have had the inevitable consequence of crippling this industry, but the live stock industry is again assuming its normal importance. Mexico is endowed by nature with excellent grazing lands, and with its continuity to American markets, it should have a promising future.

The Government has defined zones with regard to their being free or contaminated by various parasites. If animals be transported from a free to a quarantinable zone, it is necessary that they be dipped with a view of killing parasitic creatures. It is my understanding that the Governments of the United States and Mexico have a similar requirement with regard to cattle and sheep crossing the frontier, in either direction. Unfortunately, it has not been possible to obtain a list or chart showing the various free and quarantinable zones. It is believed these are arbitrarily defined divisions which vary from time to time in the light of conditions.

The Mexican import statistics give no particular classification for disinfectants for animals. However, inquiries have elicited the information that practically all of the prepared disinfectants

come from the United States. Prepared animal dips appear to have been included in larger categories of the statistics of our Department of Commerce for years previous to 1929. For the latter year, based on this source, 470,949 pounds, carrying a value of \$25,296, of prepared animal disinfectants were exported from the United States to this Republic. It seems logical to conclude from this statement that the present demand, although somewhat small, is worth catering to, particularly when its future possibilities be borne in mind. The amount of dips for cattle and sheep, consumed locally, of course, greatly exceeds the above quantity, as the major portion of this class of disinfectants is compounded locally.

Only one already mixed preparation for the dipping of animals was found on sale in Mexico City. This preparation has as its main ingredient 40 per cent of nicotine; it is in concentrated form ready to be diluted to whatever strength desired, and sells for 12 pesos gold, about \$6.00 United States currency, a liter. It is of American manufacture.

VAST herds of cattle have roamed over the cattle ranges in Mexico for many years, particularly over the northern sections of the country, but with the outbreak of the Mexican revolution in 1910, the large cattle herd rapidly became depleted until now Mexico's supply of livestock, according to an official report of the Department of Agriculture made in 1926, numbers 5,584,892 head, as compared with an estimate of 20,000,000 head prior to the revolutionary activities in 1910. Up to this time, Mexico's claim to being one of the richest agricultural countries in the world was due in a large measure to the production of live-stock. The cattle ranges in Mexico are located principally in the States of Chihuahua, Coahuila, Nuevo Leon and Tamaulipas, in the northern part of the Republic, and Durango, Zacatecas, Sonora and San Luis Potosi, in the north-central and west coast areas. There are large herds of cattle to be found in the states

for
33
years

Makers of
Coal Tar
Disinfectants
Stock Dips
Pine Oil
Disinfectants
Insecticides
Polishes
Cleansers
Liquid Soaps
Spray Products
Roofing Cements

for the
Wholesale
and
Jobbing
Trades
Only

INSECTICIDES

Prepare for the fall and winter business on household insecticides for use against bedbugs, roaches, silverfish, etc. Here are four products of unusual interest to the jobber and distributor at this season.

LIQUID INSECTICIDE

Sure death to bedbugs and roaches.
Will not stain. Non-explosive.

PERFUMED INSECTICIDE

Especially for hotels, apartments, etc.
Odor pleasant. Results sure.

PHENOL INSECTICIDE

Low cost. For use in rooming houses, jails, etc. Powerful.

ROACH POWDER

Effective 100% against ants, roaches, etc. Best obtainable.

Also best quality Fly Spray for immediate needs.

Send for samples, prices, etc., and a copy of our booklet "Chemical Specialties" containing full information.

CHEMICAL SUPPLY COMPANY

2450 Canal Road

Cleveland, O.

Established 1898

Polishes made with
Wax B964A are:

1. Non-inflammable
2. Free from solvents
3. Practically odorless
4. Free from scum and will not separate
5. Penetrating and will fill cracks and pores
6. Excellent for water-proofing materials of construction
7. Applied easily by mop, brush or spray
8. Economical because of low material and labor costs
9. Producing lustrous, durable finishes without any rubbing

Concentrated

"Rub-less" Polishes are here.

WAX B964 is a special concentrated emulsion of Carnauba Wax and resins. It is supplied in paste form. It may be dispersed in 1-2 parts of cold water to give rub-less polishes for cement, linoleum, marble, tile, oil-cloth, rubber, leather, wood and compositions. When diluted with 1 part of water the highest lustre is obtained. Dilution with 2 parts of water gives a standard gloss. If slight rubbing is permitted it may be diluted farther.

These polishes are used on cement floors not only to give a gloss but to prevent dusting and makes them water-repellant. Similarly, articles made of plaster-of-Paris or the above named materials are greatly enhanced in appearance and utility.

These coatings dry to the touch in 10-20 minutes. Floors so treated are not as slippery as when waxed. Water spilled on them may be mopped up without injuring the lustre.

Price Schedule (F. O. B. New York)

440 lb. drums
16c. lb.

40 lb. cans
21c. lb.

8 lb. cans
26c. lb.

GLYCO PRODUCTS CO., Inc.
BUSH TERMINAL BLDG. No. 5 BROOKLYN, N. Y.

Say you saw it in SOAP!

of Jalisco, Guanajuato, Hidalgo, Michoacan and Veracruz, but as a great deal of the grazing land is in the costal region of these states, difficulties in breeding are encountered because of the prevalence of the fever tick. The Mexican Department of Agriculture has done a great deal in past years to remedy these conditions by a systematic course of instruction to owners of livestock in these regions as to means of exterminating and combating such pests and to the proper care of their cattle.

Articles 166, 167, 172 and 173 of the Mexican Sanitary Code, promulgated on June 9, 1926, require that the approval of the "Departamento de Salubridad Publica" (Mexican Department of Public Health) be obtained before pharmaceutical preparations, patent medicines and toilet preparations may be sold in Mexico. In order to obtain this approval, a request must be presented, written in Spanish, to the Department of Public Health, accompanied by a sample of each of the products for which registration and a permit is desired, with an indication of the exact formula of its composition, its use, doses, and other data which may be necessary for a complete study.

The products referred to may, according to the Sanitary Code, be sold only when they have adhering to or printed upon the containers a seal of certification or label in which the Department of Public Health certifies that such products are not included in the preparations prohibited under Article 172, which prohibits, without prior permission of the Health Department of the Mexican Government, the importation of all preparations containing narcotics of whatever proportion. These labels are placed on the containers by the importer or wholesaler before distribution to the retail trade. Preparations must also bear labels stating the exact date of preparation, the composition of the remedy, the name of the manufacturer, the location of the factory or laboratory, the name of the importer and his commercial address if the article is imported, and such additional information as the Department of Public Health may require. In corresponding with the Department of Public Health, which should be addressed to the "Jefe del Departamento de Salubridad Publica, Mexico, D. F. Mexico," it is suggested that a request be made for a copy of the Sanitary Code. The registration of patent medicines, pharmaceutical specialties, and beauty preparations, is effected free of charge.

IT is believed that the only disease of importance at the time of writing for which dipping is made, is that of Texas fever (piroplamosis bovina). In districts containing only a few animals, the treatment for the parasites carrying this fever consists of intraperitoneal injections of "Tripianblau" (chemical components of

which were not explained) applied by means of a glass or rubber irrigator and cannula in the shape of a trocar. The solution injected consists of a gram of "Tripianblau" dissolved in a mixture composed of one part of chloride of sodium and 9.5 parts of distilled water. The application is made on the right abdominal region.

In those parts of the Republic where there are many cattle and sheep, a bathing method is resorted to. There follows the most popular recipe, to be compounded by the users, which has been officially sanctioned, as used in these dipping vats: Arseniuos acid or white arsenic. 2,200 kilograms

Caustic soda, at 85%.....	880	"
Carbonate of sodium.....	1,100	"
Common soap, boiled	1,430	"
Pine tar	1,100	"
Water	1,000	liters

In those cases where animals have ticks in their ears, a mixture of two parts of pine tar and one part of cotton seed oil is squirted with force into the ears of the affected animals.

CANVASSING by mail is nearly always found to be ineffective, successful trade connections being established in the vast majority of cases only by the visit of a personal representative. Many American exporters treat Mexico, except as regards customs formalities, as an extension of the American domestic market. The leading importers and wholesalers of Mexico City have traveling representatives who visit the principal markets of the Republic. Because of their familiarity with the trade territory and the language and customs of the country, these firms are in a better position to approach potential buyers than American exporters endeavoring to reach the retail trade direct, unless they establish their own offices in Mexico City and also employ traveling salesmen. The appointment of a large and well-established house in Mexico City as agent offers the additional advantage of enabling the American exporter to confine his credit risk to one concern and avoid the burden of carrying a large number of small separate accounts. From a commercial standpoint the Mexico City consular district is the most important sales territory in the Republic, as both a large majority of the population and a considerable percentage of the purchasing power of the country are centered in the Federal District.

In general, American goods are well known and liked on this market, as is evidenced by the predominant position of the United States in the import trade of this country. Contiguity and the recognized high quality of American merchandise are among the factors contributing to this situation and tend to overcome the more favorable prices and credit terms which are at times, but by

(Turn to Page 111)

Finer Atomization With



THE
NEW

TORNADO Compressor Type Electric Sprayer

A leader for years in the manufacture and sale of Portable Electric Sprayers, Breuer has maintained an enviable position by keeping step with the needs of the insecticide trade.

Now, the new TORNADO Model 52, illustrated, is ready for your inspection and use—greater power, finer atomization with new, positive pressure compressor construction, a beautiful custom-built job guaranteed to please your customers—complete, new design and operation—compact, self-contained, one hand unit—positively the most economical and efficient modern method for applying insecticides, disinfectants and germicides. Just the speedy, efficient, all-purpose unit you have always wanted to stimulate business.

The first manufacturer to see and use this new spray performance ordered 180 units immediately! Let us send you sample on free trial so that you too may use and inspect this unit. No obligation. Write us today for complete information.

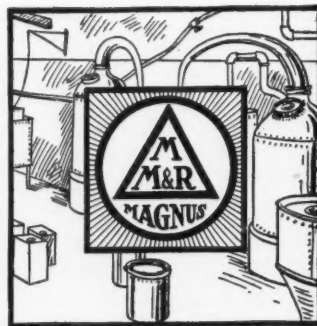
New Features You'll Like!

- 1—Not a blower type incorporates a real air compressor fan unit.
- 2—Positive pressure compressor operation atomizes insecticides into finest smoke mist obtainable.
- 3—A real, self-contained, one-hand unit.
- 4—Compact, all aluminum construction with quart container.
- 5—No shoulder straps or hose to trouble.
- 6—Powerful $\frac{1}{4}$ H.P. G.E. Universal Motor.
- 7—Weight only 4 pounds.
- 8—Just plug in—instant operation.
- 9—Fastest, finest insecticide atomization obtainable.

We also make Model 6 Tank Type and Model 50 Blower Type Sprayers.—leaders for years.



BREUER ELECTRIC MFG. CO.
862 Blackhawk St. Chicago, Ill.



ESSENTIAL OILS FOR INSECTICIDE MFRS.

Oil Cedar Leaf American
Oil Cedarwood American
Oil Pine Needles Siberian
Oil Sassafras Nat'l U. S. P.
Oil Sassafras Artificial
Oil Cassia Tech.
Oil Eucalyptus Aust. U. S. P.
Etc.

We are first hands
Assure yourself of the best quality.
Always specify M. M. & R. when
placing your orders
also

SPECIAL PERFUMES

for
SPRAYS PARA BLOCKS
LIQUID SOAP DISINFECTANTS

Write for Special Prices and Samples

Magnus, Mabee & Reynard, Inc.
Essential Oils

32 CLIFF ST.
NEW YORK CITY

Say you saw it in SOAP!

Insecticide & Disinfectant Assn. Meets Dec. 7

THE eighteenth annual meeting of the Insecticide & Disinfectant Manufacturers Association will be held at the Hotel New Yorker, New York, on December 7 and 8. The annual convention this year will be of two-day duration as was the last mid-year meeting in Chicago, and will be terminated with the annual banquet on Tuesday evening, Dec. 8. In previous years, the annual meeting has extended into the third day, closing with the election of officers. The election this year will take place on the afternoon of the second day. Sessions of the convention this year will be open only to active and associate members, and to those to whom invitations will be issued by the Board of Governors.

At the regular fall meeting of the Board of Governors of the Association, held at the Hotel New Yorker on October 6, the general plans for the convention were mapped out. Convention arrangements and the program will be in charge of Secretary Harry W. Cole. Entertainment will be in charge of Grant A. Dorland. Luncheons will be held each of the two days of the meeting, and the banquet on the evening of the second day, all of which will be open to members and non-members alike. The registration fee covering luncheons, banquet, and other features of the entertainment program, will be fifteen dollars per person.

Those who attended the Board meeting included President Robert C. White of the Robert C. White Chemical Co., Philadelphia; Secretary Harry W. Cole of Baurd & McGuire, Inc., Holbrook, Mass.; Vice-president Evans E. A. Stone of William Peterman, Inc., New York; Vice-president Peter Dougan of Merck & Co., Rahway, N. J.; W. J. Andree of Sinclair Refining Co., New York; H. W. Hamilton of Koppers Products Co., Pittsburgh; W. J. Zick of Stanco, Inc., New York; C. P. McCormick of McCormick & Co., of Baltimore; Dr. Charles Peet of Rohm & Haas Co., Philadelphia. Reports of the financial affairs of the Association from Treasurer John Powell of John Powell & Co. who was out of town, showed a condition better than at any time in the Association's history. The membership of the Association was reported at 104 companies, only two of which were in arrears for current dues.

Cultivation of pyrethrum flowers is being attempted in the Virgin Islands and at the Isabelo

Experiment Station in Porto Rico, according to a U. S. Department of Commerce report. Climatic conditions in the islands are semi-arid, closely resembling conditions in Dalmatia and Japan where the world's supply of pyrethrum flowers is now produced.

Hearing on Creosote Oil

A hearing on the proposed tariff for creosote oil will be held before the Federal Trade Commission in Washington, D. C., on October 30. The following bulletin from the Secretary of the Insecticide & Disinfectant Manufacturers Association was sent out on this subject recently:

"On March 5th of this year in Bulletin 1931-7, an announcement was made by our Tariff Committee with regard to a resolution introduced in the U. S. Senate by Hon. Royal S. Copeland of New York, directing the Tariff Commission to investigate the costs of dead or creosote oil here and abroad during the past three years. The resolution further directed the Commission to report to the Senate, giving a statement of the rates of duty necessary to equalize the difference in production costs based on the American selling price of the article. The following notice of a public hearing by the U. S. Tariff Commission on October 30th next is commended to your careful reading and such action as may seem warranted: "Public Notice of Hearing by the United States Tariff Commission. Investigation by the United States Tariff Commission for the Purposes of Section 332 of the Tariff Act of 1930.

Dead or Creosote Oil

"Notice is hereby given that a public hearing will be held at the office of the United States Tariff Commission in Washington, D. C., beginning at 10 o'clock a.m. on the 30th day of October 1931, in the investigation instituted by the Commission pursuant to the provisions of Section 332 of the Tariff Act of 1930, and in accordance with Senate Resolution No. 470, 71st Congress, for the purpose of ascertaining information concerning the difference in the costs of production and delivery to the principal market or markets of the United States during the calendar years 1928, 1929 and 1930, for the article described in paragraph 1651 of Title II of said tariff act, namely, Dead or creosote oil, produced in the principal competing country and the like or similar article produced in the United States. At the said public

MERCK'S CHEMICALS . . .



Works of Merck & Co. Inc. at Rahway, N. J.

are made on a large scale

are sold at prices based
on large-scale production

are regarded as standard
by leading insecticide
and disinfectant mfrs.

PARADICHLORBENZENE
CARBON DISULPHIDE
SODIUM FLUORIDE
CARBOLIC ACID
CARBON TETRACHLORIDE
STRYCHNINE
CRESOL U.S.P.
CORROSIVE SUBLIMATE

Methyl Salicylate

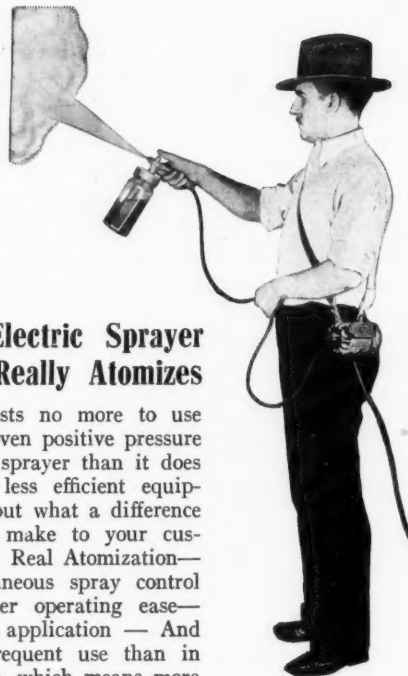
The one widely accepted odor for fly sprays—tested, tried and approved by leading manufacturers. Fresh and aromatic—pleasant to human beings, yet it does not attract insects like some of the sweeter floral essences. Merck's Methyl Salicylate is manufactured on a large scale and conforms to all U.S.P. standards. Write or 'phone our nearest office for quotations or trial order.

MERCK & CO. INC.

MANUFACTURING CHEMISTS

161 Sixth Avenue New York 4528 So. Broadway St. Louis
INDUSTRIAL DIVISION: 916 PARRISH STREET, PHILADELPHIA
Canadian Works: MERCK & CO. LTD., Montreal

Increase Your Sales With Sprayit Model 70



The Electric Sprayer That Really Atomizes

It costs no more to use this proven positive pressure electric sprayer than it does to use less efficient equipment—but what a difference it will make to your customers. Real Atomization—Instantaneous spray control—Greater operating ease—Faster application—And more frequent use than in the past, which means more insecticide used instead of wasted and better all-around satisfaction.

Sprayit Model 70 is not a blower fan type unit—It actually incorporates an air compressor. It is a tried and proven unit. Thousands upon thousands of these motor compressor units are in use throughout the United States and some seventy foreign countries.

Send for Sample Today—

Larger Equipment for Special Work—



Sprayit Model 89 illustrated here has proven very popular for commercial moth-proofing in furniture warehouses and other service of this nature. Can be furnished with 6-ft. extension nozzle if desired. Powered by 1/4 H.P. Repulsion Induction motor—two gallon tank capacity—Write for catalogue.

The Electric Sprayit Company
South Bend, Indiana

Say you saw it in SOAP!

hearing all parties interested will be given opportunity to be present, to produce evidence, and to be heard with regard to the subject matter of said investigation.

"Notice of this hearing shall be given by posting a copy thereof for thirty days prior to said 30th of October, 1931, at the office of the Commission in the City of Washington, D. C., and at the Office of the Commission at the Port of New York, and by publication prior to said date in *Treasury Decisions*, published by the Department of the Treasury, and in *Commerce Reports*, published by the Department of Commerce. By order of the United States Tariff Commission this 28th day of September, 1931. Sidney Morgan, Secretary."

—○—
A catalog of the parasites which prey on animals and men is being completed by Doctors Cooper Curtice, Albert Hassall and Charles W. Stiles at the National Institute of Health, Washington. The catalog forms several volumes, representing a complete list in all languages of all literature published about parasites. When completed it will save a great deal of time for research workers.

—○—
Exports of household insecticides and exterminators from United States during June, 1931, amounted to 611,020 pounds, worth \$185,283, as against 1,247,531 pounds, worth \$398,611, during June, 1930.

—○—
Exports of household insecticides from United States during July, 1931, amounted to 479,239 pounds, worth \$127,884, as against 1,057,346 pounds, worth \$323,065, in the same month of 1930.

The new plant of G. H. Wood & Co. in Toronto, Canada. The company also has a plant in Montreal. Products of the company include liquid soaps, disinfectants, insecticides, and sanitary specialties. The company also represents several American manufacturers on sanitary accessories in the Canadian territory. Expansion in the business of the firm has been rapid during the past few years and it has become one of the best known sanitary products manufacturing organizations in the Dominion. G. H. Wood is president of the company.

Fumigation Conferences Completed

A series of conferences on ship fumigation held in New York and Washington, D. C., during September under the auspices of the League of Nations and the International Office of Public Hygiene, and which were attended by leading fumigation experts from various parts of the world, came to a close at Washington on October 2. The conferences which lasted a month, were chiefly in the interests of disease prevention and the study of American methods of ship fumigation. Those who attended the meetings included representatives of the public health divisions of six nations, as follows: England, Dr. P. G. Stock and Dr. G. W. Monier-Williams; France, Dr. Charles Vigne; Germany, Dr. W. W. Dreyer; Holland, Dr. M. F. Bruyne; Spain, Dr. A. V. Rodriguez; United States, Dr. C. L. Williams and Dr. Carrol Fox.

The first three weeks of the conferences were held at the U. S. Quarantine Station at Rosebank, Staten Island, N. Y. and at the Public Health Service local office in the Sub-treasury Building, New York. Dr. Stock presided at the meetings, beginning on Sept. 25 and until the close of the conferences, meetings were held at the U. S. Public Health Service in Washington. Dr. H. S. Cumming, Surgeon General, presided. The discussions are expected to bring about a standardization of ship fumigation methods in various leading ports of the world. The European members of the committee sailed for home immediately following the termination of the conferences. One of the features of the meeting was the actual fumigation of a fully loaded ship with miscellaneous cargo in New York harbor with altogether successful results.



VOGEL

Insecticide Sprayer



A substantially constructed sprayer that will stand up under hard usage, priced at a remarkably low figure.

Hand and continuous sprayers, designed and manufactured to give the greatest value for the least outlay.

Also Manufacturers of
Shaker Top Cans
for paradichlorbenzene crystals

Plain or Decorated
Tin Cans
for Pastes, Soft Soaps,
Dry and Liquid Insecticides

**Holders for
Deodorizing Blocks**

*Write us about your requirements and
we will gladly submit samples and prices
without any obligation on your part.*

William Vogel & Bros.

Incorporated

"IN BUSINESS OVER 50 YEARS"

37-47 South 9th Street
Brooklyn, N. Y.

SOMETHING NEW!

Combination Urinal Screen
and Air Conditioner!



Registered
U. S. Pat. Office

SELLING Like WILDFIRE

SANI-DOME . . . the specialty that's making sales history is a Combination Urinal Screen and Convenient Deodorizing Bloc Holder in one.

The bright shiny SANI-DOME replaces the ugly old strainer plate or wire mesh screen and holds a bloc of effective deodorizer right at the chief source of odor.

The SANI-DOME is built to outlast the urinal fixture itself. Made of cast brass . . . Nickerled, chromed or lacquered, as you desire. While its screen feature prevents cigarette butts, chewing gum, paper, matches, etc., from clogging the drain . . . its special perforation allows maximum drainage.

The SANI-DOME BLOC (shown in the small picture inserted in the device) disseminates a gas which neutralizes and counteracts obnoxious odors . . . killing them as they arise . . . before they spread through the lavatory. And what's more—hands never touch the SANI-DOME when in use. A special

key comes with it.

Everyone who sees the SANI-DOME wants it . . . big building superintendents and janitors alike. It's novel and practicable and economical. And packed with sales appeal!



NOTE

A Washington jobber got a single order for 200 of them. The same opportunities are open to you. Every SANI-DOME sold means repeat orders for blocs. Every tin of blocs sold yields almost 100% profit.



U. S. SANITARY SPECIALTIES CORP.

433-41 SO. WESTERN AVE.
CHICAGO, ILL.

NEW YORK CITY

BIRMINGHAM, ALA.

Say you saw it in SOAP!

Entertains Fumigating Experts

Members of the League of Nations committee of public health experts who held a series of conferences in New York and Washington during September on methods of ship fumigation, were the guests at a luncheon on September 23 of S. S. Rosen, president of the Guarantee Exterminating Co., New York, at the Empire State Club. Following the luncheon, the visiting experts were taken on a tour of the new Empire State Building, now the tallest structure of its kind in the world, to view the latest in building sanitation, including rat and vermin proof features of the construction. The inspection tour took in the top of the dirigible mooring mast on the building to the sub-basement. Those who were present included Drs. Carrol Fox, C. L. Williams, P. G. Stock, G. W. Monier-Williams, Charles Vigne, W. W. Dreyer, M. F. Bruyne, A. V. Rodriguez, and P. A. Cooley of the Central R. R. of N. J.; J. R. Baker, secretary of the American Steamship Owners Association; John Powell of John Powell & Co.; Ira P. MacNair of *Soap*; S. S. Rosen and N. K. Concannon of the Guarantee Exterminating Co.

Philippine Insecticide Market

Mosquitoes, flies, ants, and cockroaches are in abundance everywhere in the Philippines, but apparently only the European and American residents, numbering about 10,000, make any effort toward exterminating them. The most popular household insecticides come from the United States. At least ten well-known American brands are sold and on account of the small market, competition has become extraordinarily keen. Total annual sales of insecticides approximate \$20,000. It is understood that a few firms have been importing pyrethrum from Japan and Dalmatia and mix their own preparations for local distribution. This practice, however, is on a small scale only and has not yet seriously interfered with the import trade of branded insecticides.

Electric Sprayit Company, South Bend, Indiana, has purchased the hand sprayer business of G-V Sprayer Company with plants at Wichita, Kansas, and Lebanon, Tenn. The machinery, inventories and fixtures have been moved to South Bend where the new hand sprayer division will be consolidated with the company's power sprayer division at South Bend. The acquisition of the G-V line is another step in the expansion program being carried on by Electric Sprayit Co. The company will be glad to mail a catalog to any reader interested in spraying equipment.

Doing Business in Pennsylvania

With the promise from authorities of the State of Pennsylvania that they would vigorously enforce the "foreign corporations law" of that State beginning in October, a number of inquiries to the office of the Secretary of the Insecticide & Disinfectant Manufacturers Association have asked for additional details regarding the working of the law. The following bulletin was sent out to the membership of the Association by Secretary Harry W. Cole to give further details regarding the interpretation of the law by the office of the Attorney-General of Pennsylvania:

"Reference is made to our Bulletin No. 1931-38 of August 25th, wherein you were informed of the intention of the Pennsylvania authorities to vigorously enforce on October 1st, the provisions of the foreign corporation law of that state.

"A number of letters have been received at this office relative to how this act will affect non-domiciled corporations doing business in Pennsylvania.

"In response to a letter of inquiry addressed by this office to the Attorney-General of Pennsylvania, we are informed in a communication from the Deputy Attorney-General that 'if a corporation foreign to the Commonwealth of Pennsylvania has no office or warehouse in Pennsylvania, does not employ any salesmen in Pennsylvania, employs no capital in Pennsylvania, owns no property therein, and closes no contracts in this State, the transactions of its business with residents of this State would be interstate, and it would not come within the term of 'doing business' in Pennsylvania, for which reason compliance with the provisions of the Act of June 8th, 1911, P. L. 710, is required.

"Further reference is made to the well-known case of Cheney Brothers vs. Massachusetts, in which the Supreme Court of the United States had declared that when a corporation organized under the laws of another State engaged in the practice of having its salesmen secure orders from dealers within the State, and which orders were turned over to local jobbers to be filled from the stocks of local jobbers, such foreign corporation was engaged in domestic or intrastate commerce, and being so engaged it was necessary to comply with the provisions of the foreign corporation act of such State and domesticate in the State.

"Therefore, if your salesmen are taking orders in Pennsylvania and turning these orders over to jobbers within Pennsylvania to be filled from stocks of such jobbers, you are engaged in intrastate business and must domesticate. If you maintain an office or warehouse in Pennsylvania



The SPRAYER Comes FIRST

It makes no difference how effective the insecticide or repellant may be, it **MUST** be correctly applied if the results are to be the **BEST**. The better the sprayer, the better the customer will like the product. That is the rule.

Acme Makes Sprayers to Fit Every Requirement

Over fifty years in the business has eliminated all risk and experiment in ACME products. The very height of perfection has been attained. Every sprayer carries a money-back guarantee of satisfaction. If it isn't in our regular line, we can build a sprayer to fit **YOUR** needs.

Our No. 200 sprayer is a leader. Special drip cup feature; air and spray tubes coordinated to produce a mist or fog that hangs in the air longer; special processed leather plunger, etc., etc. Tell us your needs. Write for samples and prices.



Potato Implement Company, Dept. 34
TRAVERSE CITY, MICHIGAN

LETHANE 384

The **EFFECTIVENESS** of an insecticide is its most important characteristic. **LETHANE 384** is highly toxic to flies, roaches and other pests but absolutely harmless to man, cattle and the higher animals.

Röhm & Haas Co., Inc.

222 W. Washington Square

Philadelphia, Pa.

Say you saw it in SOAP!

and hold your goods in unnecessary delay in such State and fill orders from such warehouses for delivery in Pennsylvania, you are also engaged in intrastate or domestic commerce. If, however, you are not domiciled in Pennsylvania, and do not have or maintain an office or warehouse there, and your salesmen do not take orders which are to be filled by jobbers within that State, the provisions of the Pennsylvania corporation law do not apply to you."

Cattle Dips in Mexico

(From Page 103)

no means always, offered by European manufacturers.

It is not unlikely that you will be requested to extend credit to some of the firms interested in your products. Houses of good standing are frequently granted credit of from sixty to ninety days, or even longer. Readiness to extend credit, undoubtedly facilitates the establishment of new connections. Most importers find it necessary to deal on a credit basis with their customers while at the same time they have difficulty in obtaining accommodations from local banks except on very sound security and at the amazingly high rates of interest ruling in this country (practically never less than 9 per cent and not infrequently reaching 15 per cent).

However, American firms seeking to do business in this, as in other countries for the first time, are urged to exercise very great care and prudence in investigating the responsibility of those with whom they contemplate establishing connections. Credit and collection conditions in this district are extremely uncertain at this time. Local merchants are endeavoring to reduce their stocks by holding special sales in which price reductions have been made. Several bankruptcies and liquidations have occurred.

THE Mexican customs tariff is subject to amendment by presidential decree without prior notice. Such amendments are fairly frequent and it is often difficult to obtain accurate and up-to-date data elsewhere than in Mexico City. For this reason, the Consulate General is the only American Consular office in Mexico in a position to furnish American exporters the latest information obtainable on the Mexican import tariff. It would appear from an examination of the Mexican schedule of customs duties that disinfectants are classified under 6.30.10, as disinfectants for external use, unspecified, and bears a duty of 20 centavos a kilogram, legal weight. It is necessary that various formulas be given, to enable a proper classification from the customs schedule.

Application for the registration of trade marks in Mexico, if desired, must be filled with the

"Departamento de Propiedad Industrial" of the Mexican Department of Industry, Commerce and Labor, Mexico, D. F. The law establishes a number of formalities and requirements that must be complied with to effect such registrations, which usually necessitates employing the services of patent and trade mark attorneys. The Consulate General will be glad to furnish a list of such attorneys upon request.

The analytical methods for the determination of pyrethrins in pyrethrum flowers, as suggested by Tattersfield Hobson and Gimmingham, and by Gnadinger and Corl, are discussed in *J. Agr. Sci.* 21, 115-35 (1931) by J. T. Martin and F. Tattersfield, who also suggest certain modifications in technic. They state that good concordances were obtained between analytical data and insecticidal tests employing *Aphis rumicis*. They describe a new method (an adaptation of the Hagedorn and Jensen technic for estimation of blood sugar) for the rapid and approximate evaluation of pyrethrins in unadulterated samples, which they found sufficiently sensitive to determine small quantities. In their method partial reduction of a standard alkaline solution of potassium ferricyanide is effected by means of the ketone group of the pyrethrolone fraction of the pyrethrin molecule, the degree of reduction being given by estimation of the amount of ferricyanide present before and after the reaction, by liberating the iodine equivalent of the ferricyanide and titrating with standard thiosulfate solution. Methods were worked out for the estimation of the poisons in 0.5 gram of powdered material or in a single flower head.

Exports of household disinfectants, deodorants, germicides and similar preparations from United States during July, 1931, totaled 176,422 pounds, worth \$17,164, as against 117,027, worth \$21,191, in the same month of 1930.

Rancidity Reactions

(From Page 33)

other experiments have shown, that by measuring the color intensity according to Kreis, different changes are indicated with respect to the ester than by the ascertainment of the increase in weight. Whereas the latter only gets under way after a certain induction period, the deepening of the color takes place very rapidly at the very beginning of the experiment. It later slows up again. The causes of this have already been stated. There can therefore be no basis of proportionality between the two processes.

The increase of weight on the one hand and the color intensity of the Kreis reaction on the other



HOOKER 'PARADI'

(Reg. U. S. Pat. Off.)

Hooker Paradichlorobenzene is specially prepared for use as a deodorizer and as a moth preventive. Completely volatile.

Ready for immediate shipment in 50, 100 or 200 pound barrels. Six standard crystal sizes, ranging from powder to nugget size. Let us quote on your requirements.

HOOKER CHEMICALS

CAUSTIC SODA LIQUID CHLORINE
BLEACHING POWDER
MURIATIC ACID
MONOCHLOROBENZENE
PARADICHLOROBENZENE
BENZOATE OF SODA
BENZOIC ACID
BENZOYL CHLORIDE
BENZYL ALCOHOL
BENZYL CHLORIDE
ANTIMONY TRICHLORIDE
FERRIC CHLORIDE SALT
SULPHUR MONOCHLORIDE
SULPHUR DICHLORIDE
SULPHURYL CHLORIDE



HOOKER ELECTROCHEMICAL COMPANY

Eastern

Plant—Niagara Falls, N. Y.

Sales Office—60 E. 42nd St., New York

Western

Plant—Tacoma, Washington

Sales Office—Tacoma, Washington

⊕ 1527

WAR!

We are at war! . . . have been for centuries . . . will be for a million, million centuries.

It is a continuous, never-ending conflict between MAN and INSECTS.

MAN cannot hope to win. He can manage to hold his own thru unceasing effort and aggressive combat.

He must keep up the fight . . . or be wiped from the face of the earth.

You, as an insecticide manufacturer, furnish the ammunition. We, as sprayer manufacturers, build "fire-arms" that turn an innocent looking can of liquid into a killing barrage of vapor. Our job is to engineer those fire-arms to suit the ammunition.

In short, there is a *BEST* way to apply your insecticide for maximum results. We'll be glad to offer our complete facilities in finding it . . . and with no obligation on your part. Write us today. There's a specially trained Hudson representative in your territory.

H.D. HUDSON MANUFACTURING CO.

589 E. ILLINOIS ST.
CHICAGO, ILL.

New York City
San Francisco

Minneapolis, Minn.
Philadelphia

Omaha
Kansas City, Mo.

Say you saw it in SOAP!

which are within the limits of the variation of fats, leads to the conclusion that they are both fundamentally connected with the degree of spoilage. Since these processes represent only a stage of a decomposition which is the result of a whole series of chemical reactions, the results must be carefully differentiated. It happens to be a relative method concerning which it is difficult to give a reliable opinion. At the present state of affairs, the Kreis color may be colorimetrically used for such comparative investigations where it is desirable to establish the beginning of spoilage. But when the process of rancidity has set in and it is to be followed over a long period of time, the amount of weight increase appears to be of advantage.

SUMMARY

1. A critical study of the qualitative chemical methods for the detection of rancidity of fats leads to the conclusion that these methods which are based upon quantitative processes only belong to the approximate or conventional methods.

2. The colorimetric measurement of the Kreis color gives results which are relatively reproducible under analogous conditions, except where storage has been lengthy. The method appears to be suitable for following the process of the beginning of spoilage.

3. The determination of the increase in weight caused by oxygen absorption is reproducible within certain limits. The method is less important at the beginning of the investigation than the colorimetric, but it makes it possible to follow the process over a longer period of time.

4. The increase in weight and the intensity of the Kreis color do not stand in any simple relation to each other. This is clear, these processes having been singled out from an array of chemical reactions taking place at definite stages of decomposition, but the relation to sensorily perceived rancidity is not yet understood.

References

- ¹ Biochem. Zeits. 219, 343, (1930).
- ² Schweiz. Apoth. Ztg. 60, 281, (1924).
- ³ J. Agr. Res. 26, 323, (1923).
- ⁴ Staz. sperm. agrar. Ital. 30, 613, (1897).
- ⁵ Zeit. Unters. Lebens. 32, 195, (1926).
- ⁶ Zeit. Unters. Lebens. 1, 552, (1898).
- ⁷ Mitt. Lebensmittelunters. und Hygiene 15, 98, 294 (1924).
- ⁸ Zeit. Unters. Lebens. 32, 199, (1926).
- ⁹ Color differentiated by the spectroscope.
- ¹⁰ Ind. Eng. J. 10, 471, (1918); 15, 363, (1923).
- ¹¹ Biochem. Zeits. 151, 371, (1924).
- ¹² J. Amer. Pharm. Assoc. 15, 1071, (1926); 17, 243, (1923).
- ¹³ Zeits. Unters. Lebens. 57, 419, (1929).
- ¹⁴ Results are promised using epiphydrine acetaldehyde.
- ¹⁵ J. Ind. Eng. Chem. 15, 383, (1923).
- ¹⁶ J. Sec. Chem. Ind. 43, 1258, (1924).
- ¹⁷ Chem. Ztg. 29, 705, (1905).
- ¹⁸ Chem. Ztg. 20, 599, (1896).
- ¹⁹ Annalen, 329, 269, (1903).
- ²⁰ Ber. 32, 2843, (1899).
- ²¹ Landm. Versuchsstat. 42, 381, (1893).
- ²² J. Muller, Dissertation concerning spoilage of fats, Munchen.
- ²³ Zeits. Unters. Lebens. 53, 195, (1926).
- ²⁴ Photographic light filter, Munchen, Hosstrasse 48.
- ²⁵ The color scale remained for about two years without changing; somewhat later decomposition set in.
- ²⁶ J. Chem. Soc. (1927), 3106.
- ²⁷ Zeit. angew. Chem. 41, 1193, (1928).

- ²⁸ Chem. Ztg. 17, 1453 (1893); 28, 1196, (1904).
- ²⁹ Chem. Umschau. Fette, Oele, 35, 173, (1928).
- ³⁰ Zeit. angew. Chem. 19, 2087, (1906).
- ³¹ Chem. Umschau. Fette, Oele, 32, 81, 97, (1925).
- ³² Staz. Sperm. Agrar. Ital. 30, 613, (1897).
- ³³ J. Ind. Eng. Chem. 15, 1051, (1923).
- ³⁴ J. Soc. Chem. Ind. 47, 185, (1928).
- ³⁵ Cf. the increase in pressure in volumetric research.
- ³⁶ Chem. Umschau, Fette, Oele, 35, 313, (1928).

Elbert Hubbard

(From Page 23)

bard was convinced that the only way to overcome sales resistance was to give a prize or premium with every package of soap. He added 'one hundred gifts' to the silver tea spoons, so that the \$6 assortment contained such items as:

One fine silver-plated button hook.

One lady's celluloid pen holder.

One Arabesque mat.

One glove buttoner.

Fourteen patent transfer patterns.

One wall match safe.

One gimlet.

Two celluloid collar buttons (patented).

Twenty-three pictures of the President of the U. S.

Each of these items could have been sold with unusual profit in a modern 5 and 10 cent store, but in the aggregate the hundred gifts made an imposing offer.

"Then Hubbard threw caution to the winds, raised the price of the combination box to ten dollars, and offered as a premium a tall brass kerosene-burning piano lamp with silken shade, known as the Chautauqua Lamp. The lamp had approximately the same market value as the soap itself. The theory behind the offer was that you bought soap worth ten dollars by ordinary retail price standards, and the economy of dealing direct with the factory found expression in the form of a substantial merchandise premium. The Chautauqua Lamp was shortly followed by the Chautauqua Desk, which resembled a bookcase, with drop front and mirror. Both articles were well chosen, and remained for many years the most popular numbers in a growing list of Larkin premiums.

"The premium idea made Larkin's a national institution, and John D. Larkin a multi-millionaire. A few years after the Chautauqua Lamp was announced, a woman wrote in from a small town in Pennsylvania telling that she and her neighbors seldom had ten dollars at one time, so ten of them were clubbing together every month, contributing a dollar apiece toward a combination box of Larkin soap which they divided, the members taking the premiums in rotation. It was the first of hundreds of thousands of Larkin Clubs, each representing a potential revenue of not less than a hundred dollars. No doubt some of these early clubs are in operation today, for the Larkin Co. has always cherished

If you color

you will be interested in

PYLAM FAST COLORS

*We offer a full line for
Disinfectants, Deodorants,
Liquid Soaps, Polishes,
Waxes, Floor Oils and
Emulsions.*

● Pylakrome Oil Colors

fast to light, alkali, tin; soluble in all vegetable, animal and mineral oils, and waxes and organic solvents. Recommended for waxes, polishes, creams, emulsions and floor oils.

418 Olive Green	410 Orange	1112-RR Violet
430 Blue Green	420 Red	130 Mahogany
408 Yellow	416-G Blue	119 Walnut

- **PINK S-336** for Metal Polish, a desirable shade that will not fade in storage or when exposed.
- **PYLA-NAP GREEN** for liquid Soap. Especially made for this purpose. Fast to light alkali and tin.
- **BLACK S-342** for Soaps and Emulsions. Fast to light, acid and alkali and tin. Water soluble.
- **BLACK 204** for Waxes and Polishes, Dressings and Emulsions. Fast to alkali and tin. Good fastness to light.
- **GREEN S-348** for Disinfectants. Water soluble. Fast to Cresylic and Phenol Compounds.

Send for free samples.

Send for complete price list.

PYLAM PRODUCTS CO.

*Manufacturing Chemists—Importers—
Exporters*

53 PARK PLACE NEW YORK, N. Y.

LOWELL CONTINUOUS SPRAYERS

LOWELL MODEL

Produces a finely
vaporized con-
tinuous spray.
Designed to
handle all
solutions

including
those having oil
bases. Furnished
in tin or brass con-
struction.



LOWELL REGENT

A continuous sprayer
specially designed
for household
application of



insecticides
and disinfect-
ants. Detachable
can permits quick in-
terchange of solutions.

Lowell Sprayer Co.
Lowell, Mich.

*Quality Sprayers Backed by 30
Years' Sprayer Building Experience*

Say you saw it in SOAP!

them, and mothers have passed them on to their daughters.

"With success achieved the spice and savor was gone out of the soap business for Elbert Hubbard. He made an abortive attempt to dispose of his stock in the business to soap purchasers as a new type of 'premium.' In Mr. Larkin's mind was an increasing conviction that his brother-in-law was not a safe sort of person. The year 1892 marked the beginning of a severe business depression, comparable with that of 1930, the sales curve at the factory flattened and sagged disappointingly, and Hubbard more than once entertained doubts as to the future of the business. Mr. Larkin, never led astray by his imagination, was unperturbed. There was an amicable meeting of the minds, and in January, 1893, Hubbard departed with his freedom and \$65,000 in cash and notes, subsequently paid in full by Mr. Larkin.

Editorials

(From Page 91)

applied for during the past two months at Washington, something is liable to happen in 1932. Either the world's supply of insects is going to be wiped out, or there are going to be a lot of insecticides on dealers' shelves a year from now. Apparently, everybody who has been out of a job is going in for insecticide manufacture. At this early date, we can assure them of several things,—first, that they are going to revise their ideas of the word "profit" before they are through; second, that they will wish that they had their money back; and third, that they will be looking for their old jobs again in 1933 or sooner.

Pyrethrum

(From Page 95)

value possessed by pyrethrum is its relative killing power against insects. That custom and prejudice die hard is shown by the willingness of some users of pyrethrum to put their faith blindly in a trade designation. The coming of the "fly spray" type of insecticide gave pyrethrum a far wider application and brought many new problems. Whereas it was previously used largely in powder form for crawling insects, the advent of the liquid product marked its application against all types of insect life, particularly against flying insects where the powder is not applicable.

The original liquid insecticides or "fly sprays" were vastly different than the standard products now on the market. The trade has learned much about liquid insecticides over the past few years,

and what they have learned indicates in some cases how wide of the mark the original products hit. Dangerous liquids of too high volatility were common,—not only dangerous on account of their volatility, but lacking in material effectiveness for the same reason. Pyrethrum killing power might be anything at all, and there was no assurance whatever that the full killing power, or even an appreciable portion of it, was transferred to the liquid in the extraction. Lack of experience was widespread. The average manufacturer knew little or nothing about the correct proportion of pyrethrum needed to make his product effective. In addition, prices were considerably higher than they are today, and there was a tendency in some cases to cut down the ratio of pyrethrum in the finished insecticide to save money. It was false economy as events have proved.

There has been sophistication in pyrethrum powders for years, but this has become less and less as time goes on. Of course, as long as there are low quality lots available in primary markets, there is always the chance that they will find their way to the consumer especially when they can be purchased at prices sharply under the levels quoted for prime flowers of good killing power. By way of illustration, let us point out that upon occasion it has been possible to import flowers from old crop, running very low in toxicity, at about half the cost of current crop material.

It is an unfortunate fact that all of this prejudice and false information has materially held back the full development of pyrethrum, and it is only recently that its real value as an ideal insecticide has been appreciated. That this confusion has been almost disastrous to pyrethrum is shown by the lack of confidence with which our Government scientists recommended its use. There were too many conflicting statements by those handling the product. It was kept in a sort of romantic haze by those who should have been the first to fight for its full possibilities.

In the hands of some, pyrethrum is still a complicated subject, but those genuinely desirous of a complete knowledge of the product should begin with the fundamental fact that pyrethrum derives its sole value from its actual toxicity against insects,—no matter what trade or scientific designation may be attached to it. Its only use is to kill insects and by this property its value must be judged.

Although pyrethrum has been known and used for over a hundred years, the real commercial development of the product has come since 1917. There is every reason to believe that over the next fifteen years, there will be a continuation of this development which will find the product much further along both commercially and scientifically in 1946 than it is today.

THE BEST AMMUNITION

GRANULATED OR POWDERED

PYRETHRUM

CONCENTRATED EXTRACT

Our analytical and research laboratories guarantee uniform quality and toxic value. We have specialized in Pyrethrum for almost half a century.

MCCORMICK & CO., INC.
BALTIMORE, MD.



LIGHTNIN PORTABLE MIXERS

The Modern Way
of Mixing
SOAP
Solutions



Direct-Drive
Model M
LIGHTNIN

Let us give you complete information on the LIGHTNIN models that offer the correct power, speed and dependability essential to better and more thorough mixing of your fluid products. LIGHTNIN mixers are built in direct drive and geared types and are easily attached to any open or closed tank.

ALL SIZES AND SPEEDS

MIXING EQUIPMENT CO., INC.

Originators and Largest Manufacturers of Portable Electric Mixers

Factory: 1044 Carson Ave.
Rochester, New York

229 East 38th Street
New York City

TRISODIUM PHOSPHATE DISODIUM PHOSPHATE

Preferred for their colorless crystals, uniform size and sparkling appearance. Prompt deliveries made from convenient distributing points. Packed in 325-pound paper-lined barrels and paper-lined kegs. Also in bags.

BOWKER
CHEMICAL COMPANY
419 FOURTH AVE., N.Y.C.

256 Jobbers in 12 states have found our products excellent and producing repeat business.

Write us your needs and get our prices at once.

FLY SPRAYS

INSECTICIDES

SCRUB SOAPS

COAL TAR AND PINE DISINFECTANTS

CRESOL COMPOUNDS

CHEMICAL COMPOUNDING CORP.

262 Huron St.

Greenpoint 9—5585

Brooklyn, N. Y.

Say you saw it in SOAP!

CLASSIFIED ADVERTISING

Classified Advertising—All classified advertisements will be charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, \$1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap*, 136 Liberty St., New York.

Note: All advertisements must be in publisher's hands by the first of the month for that month's issue.

Positions Wanted

Chemical Engineer and Soapmaker and factory superintendent. Experienced, boiled and cold made laundry soaps. Refining and bleaching of fats and oils. Three years in Spanish speaking country. Desires position. Address Box 801, care *Soap*.

Soapmaker—Thirty years old, married, able to manufacture high filled laundry soaps, blue mottled and soft soaps, toilet soaps milled and cold made; speaks Spanish, German and English. Twelve years practical experience. Address Box 802, care *Soap*.

Soap Maker and Chemist with many years' experience making all kinds of laundry and toilet soaps, seeking change. Good references. Can take complete charge of manufacturing. Address Box 804, care *Soap*.

Manager—Man experienced in management of soap plant both as to manufacture and selling seeks new position. Address Box 793, care *Soap*.

Salesman—Man with experience in sale of insecticide raw materials to exterminators, manufacturers, and jobbers in New York and New Jersey area, wishes new connection. Address Box 803, care *Soap*.

Salesman—Man well acquainted in the soap and allied trades desires position where his knowledge of the field and business will be of value. Desires to handle line of soap plant equipment, or raw materials for a well known house. Knows the soapmakers from coast to coast. Address Box 797, care *Soap*.

Chemist—Fully experienced in oils, fats, and soaps, and capable of handling executive work, desires change. Address Box 794, care *Soap*.

DECIDE NOW While Prices Are Low WITH CONSOLIDATED REBUILT MACHINERY

SPECIALS

- 1—Houchin-Aiken 3000 lb. Perfection Crutcher.
- 4—650 gal. Dopp Jacketed Kettles.
- 1—Houchin-1000 lb. Mixer, twin shaft.
- 1—Blanchard 10-A Mill, with feeder.
- 1—Soap Chip Dryer, with chilling Rolls, 1200 lb.

- 1—Jones A Automatic Soap Press.
- 1—Two-way Soap Cutting Table, hand.
- 1—1200 lb. Hand operated Slabber.
- 1—Houchin-Aiken 4" Plodder.
- 1—Swenson Single Glycerine Evaporator.
- 1—Strum 1200 lb. Horizontal Jacketed Crutcher.
- 1—Dopp 1500 lb. Jacketed Crutcher.
- 3—Granite 3 roll Mills, 12" x 24".
- 6—Soap Chippers, 20", 24", 30".
- 20—Filter Presses, 12" x 12" to 42" x 42".
- 1—No. 0000 Raymond Pulverizer.
- 1—No. 4 J. B. Hammer Mill.
- 1—1000 gal. Day Jumbo Jacketed Mixer.
- 16—Horizontal Mixers, 20 gal. to 500 gal.
- 35—Dopp Jacketed, Agitated Kettles, 50 gal. to 200 gal.—with spiral, bridge and double motion agitators.
- 100—Steel and Cast Iron Jacketed and Agitated Kettles, 50 gal. to 5000 gal.

MISCELLANEOUS:—Soap Frames, Copper and Aluminum Jacketed Kettles, Pony Mixers, Collapsible Tube Fillers, Tanks, Mixers, Labelers, Pumps, Boilers, etc.

Send for latest Printed Bulletins.

CONSOLIDATED PRODUCTS COMPANY, Inc.

15-21 Park Row, N. Y. C. BArlay 7-0600

We buy your idle Machinery—separate items or entire plants.

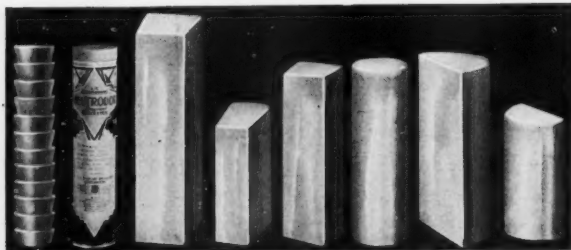
Say you saw it in SOAP!

**Persulphate of Ammonia
Persulphate of Potash
Caustic Potash
Caustic Soda**

JOSEPH TURNER & CO.

**19 CEDAR STREET
NEW YORK CITY**

**WORLD'S LARGEST PRODUCERS
of DEODORIZING BLOCS**



**OFFER YOU THEIR FAMOUS QUALITY
Under Your Private Label—**

U. S. AIR CONDITIONING BLOCS outsell all other blocs because they are moulded, hard and uniformly perfumed. Sizes and shapes (as illustrated) to fit any containers. Odors to meet current needs. Packed for you under your private label.

Handsome perforated metal containers in White Enamel, Porcelain, Oxidize or Nickel-Plate with Jobbers' nameplate.

Also NEUTRODOR URINAL BLOCETTES individually wrapped in cellophane and AEROZONE DEODORIZING CRYSTALS—both packed in beautiful lithographed tins.

Also HIK BRAND—a new line of Deodorizing Blocs and Crystals priced so low that you can meet any competition.

Write for new price bulletin on Deodorizing Blocs, Liquid Soap, Soap Dispensers, etc. New catalog on request.

U. S. SANITARY SPECIALTIES CORP.

435-41 South Western Ave.

Chicago, Illinois

Say you saw it in SOAP!



**Barrett
Standard
CHEMICALS**

In supplying manufacturers in the soap and disinfectant industries with tested chemicals, it is a matter of pride with us that Barrett service has not stopped with filling orders. Frequently these manufacturers come to us for technical advice on the use of Barrett Standard Chemicals—and frequently we are able to present suggestions of real value.

Modern laboratories and a carefully selected and trained technical staff make it possible for us to cooperate fully in the solution of production problems. Your inquiries will receive prompt attention.

**CRESOLS CRESYLIC ACIDS
TAR ACID OILS AMMONIAS**

The **Barrett** Company

40 Rector Street, New York, N. Y.

"FILMASEAL"

Trade Mark Reg.

Patents Pending

**Airtight . . .
Leakproof . . .
Tamperproof.**

A transparent film sealed to top of container

Plus our continuous thread screw cap

Film must be removed to reach contents

Used with standard C. T. bottles and jars

Automatic application . . . no decrease in output

Adapted to large scale production

One of our films will serve your purpose



FERDINAND GUTMANN & CO.
Bush Terminal No. 19 • Brooklyn, N. Y.

SANISEAL METAL MILK CAPS . . . DISTILLED WATER CAPS
CROWN CORKS
CONTINUOUS THREAD CAPS . . . SPECIAL PURPOSE CAPS

Closure Specialists Since 1890

Superintendent—Man with twenty years' experience and fine record in manufacture of soaps, textile soaps and specialties, desires new connection as plant manager or assistant. Technical education and practical experience combined. Address Box 806, care *Soap*.

Soap Maker—A man capable of taking full charge of plant making all types of soap, including liquid and oil soaps, desires new connection. Thirty years' experience. Best references. Box 807, care *Soap*.

Soap Maker—With years of actual experience in manufacturing all grades and kinds of soaps and soap products. Address Box 805, care *Soap*.

Need Help? For all types of employes with chemical experience and training, ask us. Everybody for the chemical process industries from the president to the office boy, including office, sales, plant, laboratory, and expert advisors. Quick action. Careful selection of applicants based on full information. Any location. Bureau of Employment of the Chemists' Club (Agency), 50 E. 41st Street, New York.

Positions Open

Salesmen—Men wanted in leading cities to carry as sideline new patented deodorizing device. Many already installed. Sold to hospitals, factories, office buildings, institutions, etc. Write for details. Box No. 778, care *Soap*.

Wanted—A fast growing soap manufacturer in the Middle West has an opening in their organization for a mechanical engineer to take complete charge of mechanical equipment in plant. This man must have a number of years experience in the soap plant. Address Box 795, *Soap*.

Wanted—Salesmen to sell power laundries, realty, creameries, institutions, others—cleaning products. Territories open. Address Westinghouse Chemical Co., 624 Tinton Ave., New York City.

Wanted—Chemist, young man, with practical experience in manufacture of polishes, cleaners, etc., with a good knowledge of waxes for position with joined chemical manufacturing company. State full qualifications, experience, etc., in letter of application. Box 790, care *Soap*.

SPECIALS

- 1—Proctor 4 fan Automatic Soap Clip Dryer.
- 1—Sargent 3 fan Soap Chip Dryer.
- 4—Steel watercooled Roller Mills, 9x24", 9x30", 12x30", 16x40".
- 2—Houchin Aiken Empire State Foot Presses.
- 1—Houchin Aiken Para block Press.
- 20—Standard 1200 lb. Soap Frames.

SOAP MACHINERY BARGAINS

- 1—Soap Chip Dryer, with Chilling Rolls, 1500 lbs. capacity.
- 3—Dopp & Houchin Vert. 1500 and 3000 lb. Crutchers.
- 5—Foot Presses for Soaps and Deodorizing Blocks.
- 2—Jones & Ralston Automatic Presses.
- 8—Dopp Kettles, Open and Closed.
- 1—Ernest Scott Glycerine single effect Evaporator, complete with vacuum pumps.
- 8—Cast Iron 12, 18, 24, 30, 36 inches square, Shriver and Sperry Filter Presses.
- 50—600 and 1200 lbs. capacity Frames.
- 2—3 roll Huber and H. A. Stone Mills.
- 1—4 roll Rutchman Stone Mill.
- 4—Nos. 1, 2 and 3 Meade Mills.
- 1—10A Blanchard Mill.
- 4—6", 8" and 10" Single and Twin Screw Plodders.
- 2—Broughton Mixers.
- 1—American Soap Wrapping Machine.
- 2—Slabbers, 600 and 1200 lbs. Hand and Power Driven.
- 10—Rotary Soap Pumps—1 to 4 inches.

Blowers—Exhaust Fans—Engines—Steel and Wood Tanks—Pumps—Storage Tanks—Motors—Conveyors—Elevators—Copper, Aluminum and Iron Kettles—Etc.

Send for Complete List!

We buy and sell from single items to complete plants

STEIN-BRILL CORP.

25 Church Street

New York City

PHONE!

WRITE!

Phones—BARclay 7—4850-1-2

**Agents for RODGERS
PASTE and POWDER FILLERS
CLOSERS and CRIMPERS
TUBE CLIPS — CONVEYOR TABLES**

Send for Illustrated Catalog

Say you saw it in SOAP!

probably—

You dare not change the odor effect of your insecticides, waxes, polishes and sprays.

YOU DON'T HAVE TO

yet—

You would like to save 40% to 70% of your perfuming cost—a very worth-while saving.

It Can Be Done!

Let us show you how simple it is

John Powell & Co., Inc.

114 East 32nd St.

N. Y. C.

Bound Volumes of "SOAP"

A few complete bound volumes of SOAP are available at ten dollars per copy. If you are interested it will be advisable to order promptly.

Volume Three, Sept., 1927, through Aug., 1928—2 sets
Volume Four, Sept., 1928, through Aug., 1929—1 set
Volume Five, Sept., 1929, through Aug., 1930—1 set
Volume Six, Sept., 1930-Dec., 1930—2 sets.....(\$5.00)

**MACNAIR-DORLAND
COMPANY, INC.**

136 LIBERTY STREET
NEW YORK

The New Morrison when completed, will contain 3,400 rooms

**TALLEST
Hotel
in the World
Forty-Six
Stories High**



**Chicago's
MORRISON
HOTEL**

Corner Madison and Clark Sts.

Closest in the city to offices,
theatres, stores and
railroad stations

**1,950 ROOMS NOW
500 BEING ADDED**

—all outside, with bath, running ice water,
telephone, bedhead lamp, radio set and
Servidor.

RATES, \$2.50 UP

INCREASE SALES!

*by packaging your Dry
Products in*



TIN SLIP ON COVER PACKERS

Moisture
Resisting

Stock Sizes
1 oz. to
32 oz.



Supplied in
Sifter,
Friction,
Pour out,
plain or
colored
tops.

Samples and quotations gladly furnished.

**THE CINCINNATI MAILING
DEVICE COMPANY**

Fibre Can and Tube Specialists since 1902

**294 EGGLESTON AVE.
CINCINNATI, OHIO**

Say you saw it in SOAP!

Man Wanted—National known insecticide manufacturer of popular priced line has opening for alert, aggressive salesman with a good following. Unusually fine opportunity for right man, with chance for executive position. Write full details in first letter. Box 774, care *Soap*.

Salesmen Wanted—Brushes, janitor supplies, sanitary specialties, soaps, chemicals for open territories. We manufacture and distribute to the largest users. Liberal commissions, exclusive territory. References exchanged. J. S. Costello & Son, 1108 Pine St., St. Louis, Missouri.

Miscellaneous

Wanted—A complete experimental soap plant in good condition. Price must be cheap. Should include mill, plodder, press, motors, etc. One which has been in use recently and can be set up at once. Address with full details. Box 796, care *Soap*.

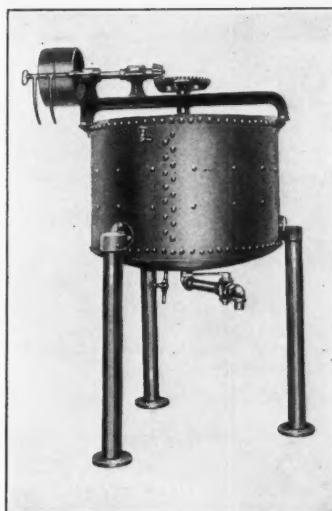
For Sale—Pumacite or volcanic ash, milled and sized to any degree of fineness desired. It is very white and of exceptional quality. We can supply any demand at attractive prices. Low freight rate to seacoast points. Samples and particulars sent on request. Acme Silica Corp., Ltd., Room 366, Habersfeld Building, Bakersfield, Calif.

Variegated Milled Toilet Soap—A brand new and sensational item can be made the same as ordinary one color type without change of equipment. Variety of marvelous coloring effects feasible. Ask for sample. Working instructions sold. Communicate with Box 799.

We Buy waste products, by-products, sludges, residues, etc. Chemical By-Products Division, New Jersey Color Company, 221-233 Suydam Avenue, Jersey City, N. J.

Cash for Surplus—Specialties, Chemicals, Soaps, Oils, Waxes, Gums, Dyes, Solvents, Metals, By-Products, Residues. Confidential services when required. Chemical Service Corp., 36 Park Row, New York, N. Y.

Exports of caustic soda from United States during July, 1931, totaled 11,437,713 pounds, priced at \$317,066, with Japan again the largest buyer with purchases aggregating 2,276,509 pounds.



SHOWING a very practical machine to reduce Liquid Soap Base or Concentrates to any percentage wanted by the mere addition of heat, water and a little power.

Provided with hotter steam, liquid soap can be made from raw materials.

Cold Process soap making equally feasible.

No expert knowledge is required to reduce soap bases to thin liquids. Save costs by adding the water yourself. A slow motion machine, but it does the work effectively and at little cost.

Built in six different sizes and capacities.

Huber Machine Co.

262 46th St.

Brooklyn, N. Y.

**We Manufacture
For The Trade ONLY**

Liquid Soap Base

Auto Soaps

Potash Oil Soap

Shampoo

U.S.P. Cresol Compound

Coal Tar Disinfectants

Liquid Soap

Pine Oil Soap

U.S.P. Green Soap

Shampoo Base

Pine Oil Disinfectants

Insecticides

Ask for samples of these specialty bulk products!

HARLEY SOAP CO.

2852 E. Pacific St.

Philadelphia

Say you saw it in SOAP!

Where to buy

RAW MATERIALS AND EQUIPMENT

for the Manufacture of Soaps and Sanitary Products

NOTE: This is a classified list of the companies which advertise regularly in *Soap*. It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, etc., in which you are particularly interested. Refer to the Index to Advertisements, on the following pages, for page numbers. "Say you saw it in SOAP."

ADHESIVES

Grasselli Chemical Co.
Mechling Bros. Chemical Co.
National Adhesives Corp.
Philadelphia Quartz Co.
Standard Silicate Co.

ALKALIES

Columbia Alkali Co.
Diamond Alkali Co.
Dow Chemical Co.
Hooker Electrochemical Co.
Niagara Alkali Co.
Solvay Sales Corp.
Stauffer Chemical Co.
Warner Chemical Co.
Welch, Holme & Clark Co.

AROMATIC CHEMICALS

Antoine Chiris Co.
Dodge & Olcott Co.
Dow Chemical Co.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co.
Felton Chemical Co.
Benj. French, Inc.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard
Merck & Co.
Monsanto Chemical Works
Newport Chemical Works
Polaks Frutal Works
Schering Corp.
George Silver Import Co.
Solvay Sales Corp.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

BULK AND PRIVATE BRAND PRODUCTS

Alpine Chemical Co.
Baird & McGuire, Inc.
Chemical Compounding Corp.
Chemical Supply Co.
Clifton Chemical Co.
Davies-Young Soap Co.
Eagle Soap Corp.
Harley Soap Co.
Koppers Products Co.
Kranich Soap Co.
Edgar A. Murray Co.
Palmer Co.
John Powell & Co.
Ratin Laboratory
Geo. A. Schmidt & Co.
Stevens Soap Corp.
U. S. Sanitary Specialties Corp.
White Tar Co.
Windsor Wax Co.

CANS

Continental Can Co.
Metal Package Corp.
William Vogel & Bro.

CHEMICALS

Columbia Alkali Co.
Diamond Alkali Co.
Dow Chemical Co.
E. I. du Pont de Nemours & Co.
Grasselli Chemical Co.
Hooker Electrochemical Co.
Mechling Bros. Chemical Co.
Merck & Co.
Monsanto Chemical Works
Newport Chemical Works
Niagara Alkali Co.
Philadelphia Quartz Co.
Solvay Sales Corp.
Standard Silicate Co.
Stauffer Chemical Co.
Joseph Turner & Co.
Victor Chemical Works
Warner Chemical Co.
Welch, Holme & Clark Co.

COAL TAR RAW MATERIALS

(Cresylic Acid, Tar Acid oil, etc.)

Baird & McGuire, Inc.
Barrett Co.
Koppers Products Co.
Monsanto Chemical Works
White Tar Co.

CONTAINERS

(See also Steel Containers)

Bemis Bros. Bag Co. (Bags)
Cincinnati Mailing Device Co. (Paper Cans)
Sun Tube Corp. (Collapsible Tubes)

DEODORIZING BLOCK HOLDERS

Eagle Soap Corp.
Palmer Co.
U. S. Sanitary Specialties Corp.
William Vogel & Bro.

ESSENTIAL OILS

Antoine Chiris Co.
Dodge & Olcott Co.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
Leghorn Trading Co.
Magnus, Mabee & Reynard
Polaks Frutal Works
George Silver Import Co.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

(Continued on Page 124)

Consulting Chemists and Engineers

Specializing in Soaps, Disinfectants, Insecticides, Polishes, Etc.

FOSTER D. SNELL, A. M. Ph. D.

130 CLINTON ST., BROOKLYN, N. Y.

Consulting Chemist

RESEARCH
ANALYSIS

CONSULTATION
OPERATION

SOAP, POLISH AND SPECIALTIES

Samuel P. Sadtler & Son, Inc.

Consulting Chemists and Analysts

210 S. 13th St.

Philadelphia

Specializing in

OILS-SOAPS-POLISHES-ETC.

Analyses—Practical Formula Development

"IF YOUR PROBLEMS HAVE ANY CONNECTION WITH SOAP oils, finishing materials, cosmetics, polishes or insecticides, we guarantee to solve them or

OUR SERVICE COSTS YOU NOTHING."

Illinois Chemical Laboratories, Inc.

1164 W. 22nd Street

CHICAGO

Canal 7313-7314

Charles H. LaWall

Jos. W. E. Harrison

LaWall & Harrison

Chemists

Analytical—Consulting—Research

Phenol Coefficients

214 S. 12th St.

Philadelphia

BUREAU OF CHEMISTRY

of the
New York Produce Exchange

H. P. TREVITHICK, Chief Chemist

Soaps, Vegetable Oils, Glycerine, Shellac

Rooms F-12-16

2 Broadway

Produce Exchange Bldg.

New York, N. Y.

Member Association of Cons. Chemists and Chemical Engineers

CONSULTING CHEMISTS AND ENGINEERS

offering their services to manufacturers of soaps, disinfectants, household insecticides, polishes, cleansers, etc., should keep themselves before the entire industry regularly through the use of space in this department of SOAP.

Specialist in
OILS, FATS, WAXES

CHARLES V. BACON

Chemical Engineer

3 Park Row

New York

ALAN PORTER LEE
Engineer

SOAPMAKERS' PROCESSES
OIL EXTRACTION—REFINING
VACUUM BLEACHING—HYDROGENATION
FATTY ACID AND GLYCERINE TECHNIC

*Design, Construction, Operation
Reports, Appraisals*

136 Liberty St., New York, U. S. A.

CONSULTING CHEMISTS AND ENGINEERS

offering their services to manufacturers of soaps, disinfectants, household insecticides, polishes, cleansers, etc., should keep themselves before the entire industry regularly through the use of space in this department of SOAP.

SEIL, PUTT & RUSBY, INC.

16 East 34th Street, New York City

Specialists in the analysis of

Essential and Fatty Oils

Aromatic Chemicals

Pyrethrum Sprays and Powder

TELEPHONE ASHland 4-4343

PEASE LABORATORIES, INC.

39 West 38th Street, New York City

*Chemical, Bacteriological, Sanitary and
Physiological Investigations*

Consultants on Technical Advertising, Literature
and Labels

Skinner & Sherman, Inc.

246 Stuart Street, Boston, Mass.

Bacteriologists and Chemists

Disinfectants tested for germicidal value of phenol coefficient by any of the recognized methods.

Research—Analyses—Tests

Say you saw it in SOAP!

RAW MATERIAL and EQUIPMENT GUIDE

(Continued from Page 122)

NOTE: This is a classified list of the companies which advertise regularly in *Soap*. It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, etc., in which you are particularly interested. Refer to the Index to Advertisements, on the following pages, for page numbers. "Say you saw it in SOAP."

MACHINERY

Alsop Engineering Co. (Liquid mixing, filling and storage)
Anthony J. Fries (Soap Dies)
Houchin Machinery Co. (Soap Machinery)
Huber Machine Co. (Soap Machinery)
R. A. Jones & Co., (Auto. Presses; Cartoning Machy.)
Mixing Equipment Co. (Portable Mixers)
Proctor & Schwartz (Dryers)
C. G. Sargent's Sons Co. (Dryers)
Solutionizer Co. (Sudsing Equipment)
Sowers Mfg. Co. (Crutchers)
Stokes & Smith Co. (Packaging Machinery)
Wurster & Sanger, Inc. (Soap, Glycerine, Oil, Hydro plants)

MACHINERY, USED

Consolidated Products Co.
Newman Tallow & Soap Machinery Co.
Stein-Brill Co.

METAL CAPS

Anchor Cap & Closure Corp.
Ferdinand Gutman & Co.
Williams Sealing Corp.

OILS AND FATS

Emery Industries, Inc.
Spencer Kellogg & Sons
Leghorn Trading Co.
Newman Tallow & Soap Machinery Co.
Welch, Holme & Clark Co.

PARADICHLORBENZENE

Dow Chemical Co.
E. I. du Pont de Nemours & Co.
Hooker Electrochemical Co.
Monsanto Chemical Works
Niagara Alkali Co.
Solvay Sales Corp.

PERFUMING COMPOUNDS

Antoine Chiris Co.
Dodge & Olcott Co.
P. R. Dreyer, Inc.
Evergreen Chemical Co.
Felton Chemical Corp.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
E. M. Laning Co.
Magnus, Mabey & Reynard
Polaks Frutal Works
George Silver Import Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

PYRETHRUM PRODUCTS

(Insect Flowers, Powder and Pyr. Ext.)

J. L. Hopkins & Co.
McCormick & Co.
McLaughlin, Gormley, King Co.
John Powell & Co.

RAW MATERIALS, MISCELLANEOUS

Darco Sales Corp. (Decol. Carbons)
Franks Chem. Prods. Co. (Stearates)
General Naval Stores Co. (Pine Oil-Rosin)
Hercules Powder Co. (Pine Oil and Rosin)
Merck & Co. (Lanolin and Chlorophyll)
National Adhesives Corp. (Adhesives)
Rohm & Haas Co. (Insecticide Base)
Pylam Products Co. (Lathering Agent)

SOAP COLORS

Fezandie & Sperrle
Pylam Products Co.

SOAP DISPENSERS

Bobrick Mfg. Co.
Clifton Chemical Co.
Eagle Soap Corp.
Palmer Co.
U. S. Sanitary Specialties Co.

SODIUM SILICATE

Grasselli Chemical Co.
Mechling Bros. Chemical Co.
Philadelphia Quartz Co.
Standard Silicate Co.

SPRAYERS

Breuer Electric Mfg. Co.
Dobbins Mfg. Co.
Electric Sprayit Co.
Hudson Mfg. Co.
Lowell Sprayer Co.
Potato Implement Co.
William Vogel & Bros.

STEEL CONTAINERS

Niles Steel Products Co.
Republic Steel Package Co.
John Trageser Steam Copper Works (Pails and Drums)
Wilson & Bennett Mfg. Co. (Pails and Drums)

TRI SODIUM PHOSPHATE

American Cyanamid Co.
Bowker Chemical Co.
Grasselli Chemical Co.
Victor Chemical Works
Warner Chemical Co.

T
W
I
T
C
H
E
L
L**Liquid Kontakt***for
High Grade
Fats***Kontakt D. P.***for
Low Grade
Fats***THE TWITCHELL PROCESS COMPANY**
CINCINNATI OHIOP
R
O
C
E
S
S

Economy and Safety combine forces to make Bemis Waterproof Bags the most satisfactory of all containers for dry soap.

Low in cost, waterproof, siftproof.
Write for samples and prices.

BEMIS BRO. BAG CO.
605 S. Fourth Street, St. Louis, Mo.
5108 Second Ave., Brooklyn, N.Y.

03882

Bemis *Waterproof* **BAGS****SOAP
POWDER**

FLUFFY AND HEAVY

**Scouring Powder
and
Detergent**

*Packed in barrels or kegs.
In bulk to the trade.*

STEVENS SOAP CORP.
200 Sullivan St., Brooklyn, N. Y.
CUMberland 6—3747

**MECHLING'S
SILICATE OF SODA****The Proper Grade For Your Requirements****MECHLING BROS. CHEMICAL COMPANY**

PHILADELPHIA

CAMDEN, N. J.

BOSTON, MASS.

Say you saw it in SOAP!

Palmer Soap Dispensers

The Palmer line includes a type and size dispenser for every requirement . . . in a complete price range.

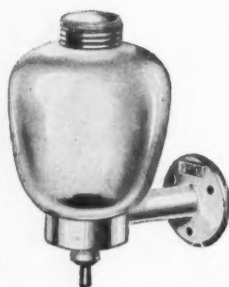
The *Super Server*, illustrated at right, is a low-priced push-in type dispenser that is an exceptional value. Metal parts are non-corrosive, stainless, chrome alloy. Beautiful natural chrome finish bracket. Valve parts are easily removed for cleaning or replacement. Crystal glass decagon bowl (opal glass on special order). Large one-inch opening for easy filling. A neat, compact, durable dispenser. The lowest-priced push-in dispenser.

Palmer "D. C." Dispenser (Dependable Construction)

The lowest-priced dispenser of this type ever offered. Not necessary to remove or invert bowl for filling—pour in soap through one-inch top opening. Has simple, positive, spring-controlled valve. Regularly furnished with decagon bowl like *Super Server*, or with round bowl as illustrated on special orders.

We manufacture a complete line of janitor and sanitary supplies. Write for our distributor proposition.

Palmer
PRODUCTS INC.
WAUKESHA, WIS.
Adjacent to Milwaukee



STEEL DRUMS

That are built to last!



30-55-110 gal. sizes

The BEST
Containers for
LIQUID SOAPS
DISINFECTANTS
CLEANSERS
ESSENTIAL
OILS
VEGETABLE
OILS
CHEMICALS
GLYCERIN
ETC.

Black, Galvanized,
Tinned

Sturdy and long lasting, the Trageser heavy duty steel drum will be carrying your materials to market long after cheap containers have found the junk pile. Order a sample drum.

JOHN TRAGESER STEAM COPPER WORKS
GRAND STREET MASPETH, L. I., N. Y.

Special tanks, tubs, pails, etc.

Index to Advertisements

Alpine Chemical Co.	80
Alsop Engineering Co.	8
American Cyanamid Co.	68
Anchor Cap & Closure Corp.	100

Charles V. Bacon	123
Baird & McGuire, Inc.	83, 90
Barrett Co.	118
Bemis Bros. Bag Co.	125
Bobrick Mfg. Corp.	36
Bowker Chemical Co.	116
Breuer Electric Mfg. Co.	104

Chemical Compounding Corp.	116
Chemical Supply Co.	102
Antoine Chiris Co.	24
Cincinnati Mailing Device Co.	120
Clifton Chemical Co.	13
Columbia Alkali Co.	58
Consolidated Products Co.	117
Continental Can Co.	Sept. Issue

Darco Sales Corp.	23
Davies-Young Soap Co.	9
Diamond Alkali Co.	6
Dodge & Olcott Co.	54
H. W. Dopp Co., Sowers	127
Dow Chemical Co.	2nd Cover
P. R. Dreyer Inc.	40, 96
E. I. du Pont de Nemours & Co.	4, 76
Durkee Famous Foods, Inc.	August Issue

Eagle Soap Corp.	17
Early & Daniel Co.	Sept. Issue
Electric Sprayit Co.	106
Electro Bleaching Gas Co.	60
Emery Industries, Inc.	62
Evergreen Chemical Co.	75

Felton Chemical Co.	10, 87
Fezandie & Sperrle	127
Fort Shelby Hotel	Sept. Issue
Franks Chem. Products Co.	129
Benj. French, Inc.	71
Anthony J. Fries	127
Fritzsche Brothers, Inc.	7
Furness-Bermuda Lines	14

General Naval Stores Co.	48
Givaudan-Delawanna, Inc.	Front Cover, 82
Glyco Products Co.	102
Grasselli Chemical Co.	59
Ferdinand Gutmann & Co.	118

Harley Soap Co.	121
Hercules Powder Co.	16, 86
Hooker Electrochemical Co.	112
J. L. Hopkins & Co.	98
Houchin Machinery Co.	Back Cover
Huber Machine Co.	121
Hudson Mfg. Co.	112

Illinois Chemical Laboratories	123
-------------------------------------	-----

R. A. Jones & Co.	August Issue
------------------------	--------------

Spencer Kellogg & Sons	64
Koppers Products Co.	85
Kranich Soap Co.	74

E. M. Laning Co.	79
La Wall & Harrison	123
Alan Porter Lee	123
Leghorn Trading Co.	128
Lowell Sprayer Co.	114

Say you saw it in SOAP!

FLOOR WAX

LIQUID

PASTE

POWDER

UNDER YOUR OWN LABEL

We print the label

Send for Samples and Quotations

WINDSOR WAX COMPANY

50 Church Street

 CORtlandt 7-7670
 Factory: 611-617 Newark St., Hoboken, N. J.

New York, N. Y.

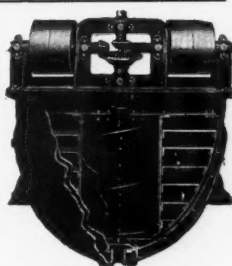
Save Money in the Mixing of Your Soap Specialties

By far the cheapest way to heat, cool and mix many heavy soaps is in the Dopp "A-D" Mixer. It is especially built for handling heavy semi-fluid or pasty substances.

You save in time, steam, power and labor, because you can get more batches per mixer per day. The compound action of the central conveyor screw and outer revolving sweep with scrapers keeps every cubic inch of the mass working constantly. No stagnant spots in this mixer where lumps may find a quiet retreat—no chance of a sticky layer accumulating on kettle wall to harden and scorch, or to provide effective insulation against rapid heat transfer.

When piped and operated according to instructions you can heat-with-steam and cool-by-water alternately in the one mixer. No waiting—no fear of sudden strains opening up seams or joints, for Dopp *seamless* construction eliminates all seams, joints, welds, bolts, rivets, etc.

Write for details and prices on the Dopp "A-D" Mixer. Specify size mixer you are interested in, and nature of material to be handled.



Dopp "A-D" Mixer, made in sizes from 10 to 1000 gallons inclusive.

COWERS MANUFACTURING CO.

MANUFACTURERS OF DOPP EQUIPMENT
FOR HEATING, COOLING AND MIXING

1296 NIAGARA ST., BUFFALO, N. Y.
New York Boston Toronto

Seamless DOPP Leakless

F. & S.

Quality Colors
for

TOILET SOAPS LIQUID SOAPS

TOILET PREPARATIONS

Long experience enables us to produce colors for all types of soaps.

If you have a shade you want matched send us a sample. We have complete facilities for matching.

Liquid soap colors a specialty—send for samples of F. & S. greens and ambers.

FEZANDIE & SPERRLE, Inc.

205 FULTON STREET
NEW YORK, N. Y.

Import—Manufacture—Export

SOAP DIES and STAMPS

For Foot and Power Presses

Manufacture Backed by 35 Years' Experience

ANTHONY J. FRIES

717 Sycamore Street

Cincinnati, O., U. S. A.

- for -
TOILET SOAPS
LAUNDRY SOAPS
BATH TABLETS
STAMPING

Say you saw it in SOAP!

Olive Oil

Olive Oil Foots

Deliveries spot and future in barrels, tank cars, drums or tank wagons.

ESSENTIAL OILS

Lemon—Bergamot—Orange

LEGHORN TRADING CO.

INC.

155 East 44th St., New York

Phone: VAnDerbilt 3-6361-2-3

ITALY — SPAIN — GREECE — TURKEY — AFRICA

A 35 Year Old Insecticide Line with Money-Back GUARANTEE

For 35 years, Edgar A. Murray Insecticides have met the needs of the janitor supply trade satisfactorily. Those who sell them have found them absolutely reliable and uniform in quality at all times.

So sure are we that you, too, will be pleased with them that we offer them to you with an iron-clad money-back guarantee—"No Rid-dance, No Pay."

If you are not handling a line of guaranteed insecticides, get the Edgar A. Murray proposition. Mail the coupon TODAY for complete information, prices and discounts.

EDGAR A. MURRAY CO.

2729 Guoin Street

Detroit, Mich.

A Complete Line of Six Guaranteed Insecticides

Fly, Ant, Rat,
Bug, Mosquito,
Moth



MAIL THIS COUPON TODAY

EDGAR A. MURRAY CO.

2729 Guoin Street, Detroit, Mich.

Gentlemen:—Please send us further information regarding your insecticide line, prices, discounts, etc.

FIRM NAME

ADDRESS

CITY STATE

Index to Advertisements (cont.)

Magnus, Mabee & Reynard	104
Manufacturing Chemist	130
McCormick & Co.	116
McLaughlin, Gormley, King Co.	81
Mechling Brothers Chemical Co.	125
Merck & Co.	106
Metal Package Corp.	84
Mixing Equipment Co.	116
Monsanto Chemical Works	77
Morrison Hotel	120
Edgar A. Murray Co.	128

National Adhesive Corp.	Sept. Issue
Newman Tallow & Soap Machinery Co.	15
Newport Chemical Works	4
Niagara Alkali Co.	60
Niles Steel Products Co.	61

Palmer Products	126, 129
Les Parfums de France	62
Pease Laboratories	123
Philadelphia Quartz Co.	72
Potato Implement Co.	110
Polaks Frutal Works	73
John Powell & Co.	78, 120
Proctor & Schwartz, Inc.	70
Pylam Products Co.	66, 114

Ratin Laboratory	129
Republic Steel Package Co.	Sept. Issue
Rohm & Haas Co.	110

Samuel P. Sadtler & Son, Inc.	123
C. G. Sargent's Sons Corp.	Sept. Issue
Schering Corp.	55
Geo. A. Schmidt & Co.	Sept. Issue
Seil, Putt & Rusby	123
George Silver Import Co.	46
Skinner & Sherman	122
Foster D. Snell	123
Soap Trade & Perfumery Review	130
Solutionizer Co.	65
Solvay Sales Corp.	34
Sowers Mfg. Co.	127
Standard Silicate Co.	74
Stauffer Chemical Co.	69
Stein-Brill Corp.	119
Stevens Soap Corp.	125
Stokes & Smith Co.	3
Sun Tube Corp.	Sept. Issue

A. M. Todd Co.	66
John Trageser Copper Works	126
Joseph Turner & Co.	118
Twitchell Process Co.	125

Ungerer & Co.	18, 3rd Cover
United Hotels Co.	57
U. S. Sanitary Specialties Corp.	108, 118, 129

Van Ameringen-Haebler, Inc.	88, 89
Albert Verley, Inc.	11
Victor Chemical Works	70
William Vogel & Bros.	108

Warner Chemical Co.	67
Welch, Holme & Clark Co.	56
White Tar Co.	85
Williams Sealing Corp.	Sept. Issue
Wilson & Bennett Mfg. Co.	72
Windsor Wax Co.	127
Wurster & Sanger, Inc.	63

Say you saw it in SOAP!

Palmer MYSTIC GLOSS

*Dries Bright
and Hard in a
Few Minutes*

THE PREFERRED FLOOR FINISH AMONG
SCHOOLS AND OTHER PUBLIC INSTITU-
TIONS—ENDORSED BY LEADING FLOOR
MANUFACTURERS

BECAUSE

It is the most economical of all floor finishes . . .
Actually reduces floor maintenance costs up to 50% . . .
Makes brighter, cleaner floors . . .
Easy to apply . . . easily maintained . . .
Floors ready to use 20 minutes after application . . .
Does not stain baseboards or furniture . . .
Equal to any wax in wearing qualities . . .
May be applied on rubber, asphalt, asbestos, or other
soft composition floors as well as wood, terrazzo, and
similar surfaces.

Write for trial sample and literature. We will gladly send
you names of institutions, etc., now using Mystic Gloss.

Manufacturers
of
MULTI-SERVICE
PRODUCTS

Palmer
PRODUCTS INC.
WAUKESHA, WIS.
Adjacent to Milwaukee

Submit your
sanitary and
cleaning prob-
lems to us.



34¢

**BUYS THE FINEST
DEODORIZING BLOC
HOLDER MADE!**

Equipped with Lock
Sliding Back

Distinctive, Graceful
Design

Made of 24 Gauge
Heavy Metal
Not Easily Breakable

Furnished Plain So
Your Nameplate Can
Be Attached

Beautiful, Oxi-
dized Finish

Height Overall 8" x 2 1/2"
x 2 1/4" Takes 25 or 16
Ounce Deodorizing Bloc

**U. S. SANITARY
SPECIALTIES CORP.**

433-41 So. Western Ave.
CHICAGO, ILL.

Stearates of UNIFORM QUALITY

**ZINC
CALCIUM
ALUMINUM
MAGNESIUM**

Stocks Carried at

New York
St. Louis
San Francisco
New Orleans

Chicago
Los Angeles
Des Moines
Kansas City

**FRANKS CHEMICAL
PRODUCTS CO.**

Bush Terminal No. 8

Brooklyn, N. Y.



RATIN

*a profitable
side line!*

You are always looking for ways to
increase your profits. Why not act as
RATIN representative in your locality?
This proved rat and mice exterminator
may be handled along with your regular
line of sanitary products at a nice profit.

May we submit complete details?

The Ratin Laboratory, Inc.

116 Broad Street, New York City

Say you saw it in SOAP!

ADVANCED SOAP-MAKING



*A Specimen Copy will be willingly
forwarded free on application.*

148, Fleet Street London, E. C. 4

AN IMPORTANT INDUSTRIAL PUBLICATION

The Manufacturing Chemist

Pharmaceutical, Cosmetic, and Photographic Trade Journal

THE MANUFACTURING CHEMIST deals exclusively and authoritatively with the production, manufacture and packing of drugs, pharmaceuticals, cosmetics, toilet preparations, photographic materials, soaps, fine chemicals, essential oils, perfumes, dental preparations, patent foods, and medicines in liquid, powder, paste, pill or tablets, polishes, antiseptics, germicides.

Read by those who make what the Retail Chemist sells

Subscription 10/- per annum post free home and abroad

Published at the same address:

FOOD MANUFACTURE.
PAINT MANUFACTURE.
RUBBER INFORMATION.
and THE CHEMICAL ENGINEERING
& CHEMICAL CATALOGUE.

LEONARD HILL LTD.,
231 STRAND W. C. 2
London England

Say you saw it in SOAP!

DO YOU KNOW

that . . .

the knowledge acquired by our years of experience in working with — and solving — the problems of soap perfumery, is at your complete disposal? Coupled with this, is the added feature of a completely equipped and modern perfume and research laboratory, constantly working in the interests of our customers, new and old.

MUSK XYLENE
SOAPMAKERS' OILS
BASIC RAW MATERIALS

and . . .

We have a most complete series of soap perfume odors — including Unco Sapodors — all specially tested and classified as to their utility for incorporation in your products.

A letter or telephone call will bring you an Ungerer representative with samples and complete information as to their application.

IONONES
ODANOL (*Technical*)
VIOLAE (*Pure*)

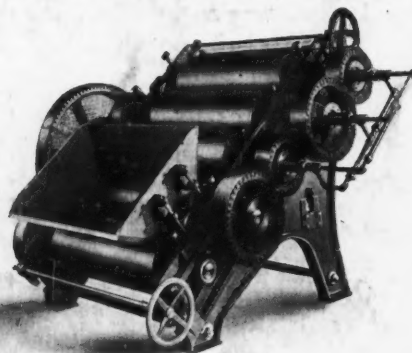
METHYL IONONES
IRISZONE "S" (*Technical*)
IRISZONE (*Pure*)

UNGERER & CO.

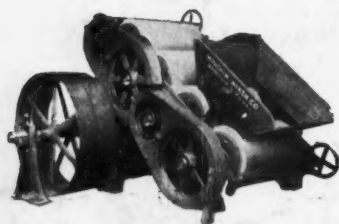
13-15 West 20th Street
NEW YORK

HOUCHIN SOAP MACHINERY

American
Mills and Plodders
for
American Toilet and Flake Soaps

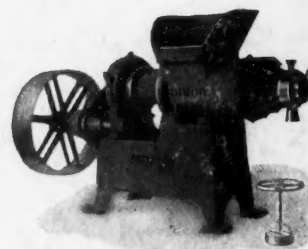


5-Chilled Iron Roll Mill



4-Roll Mill

MILLS with three, four or five
Granite or Chilled Iron Rolls.
PLODDERS with two and one-half,
four, six, eight, ten or twelve inch
Screws.



10" Plodder

Our chilled iron rolls are made by the
WORLD'S LARGEST MANUFACTURER
of rolls and are considered the BEST
OBTAINABLE — MACHINED INSIDE

AND OUTSIDE. Mills are made with
extra large shafts, bronze bushed oil-tight
bearings, heavy cut cast iron gears with
herring-bone driving gear and pinion.

ENGRAVED SOAP DIES, ALL SHAPES AND SIZES, FOR POWER AND FOOT PRESSES

America's Leading Soap Machinery House Invites Your Inquiries!

HOUCHIN MACHINERY CO., INC.
HAWTHORNE FORMERLY HOUCHIN-AIKEN CO., INC. NEW JERSEY

HOUCHIN SOAP MACHINERY
